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CHILDREARING, SOCIAL CONTACT, AND DEPRESSION: 
A STRUCTURAL ANALYSIS OF THE TRANSITION TO PARENTHOOD

by

Allison Christi Munch-Rotolo

A Dissertation Submitted to the Faculty of the 
DEPARTMENT OF SOCIOLOGY 
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For the Degree of 
DOCTOR OF PHILOSOPHY 
In the Graduate College 
THE UNIVERSITY OF ARIZONA 

2000
As members of the Final Examination Committee, we certify that we have read the dissertation prepared by **ALLISON CHRISTI MUNCH-ROTOLI** entitled **CHILDFEARING, SOCIAL CONTACT, AND DEPRESSION: A STRUCTURAL ANALYSIS OF THE TRANSITION TO PARENTHOOD** and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

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Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copy of the dissertation to the Graduate College.

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SIGNED: Alhusn Munch Rotolo
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The sample of parents was obtained with the cooperation of Pima County Superior Court under the direction of Jury Commissioner Harris and Presiding Judge Brown. The entire staff of the jury assembly room (who are not permitted to divulge their names) welcomed me, performed their jobs cheerfully, and instilled in me a great sense of confidence in the jury selection phase of our justice system. And of course, I owe all of the respondents a tremendous debt of gratitude for freely sharing their time and energy.

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DEDICATION

This dissertation is dedicated to my daughter Anna, who has greatly advanced my understanding of the transition to parenthood, and who redeems me with more joy than I deserve each day.
## TABLE OF CONTENTS

LIST OF TABLES........................................................................................................... 10
LIST OF FIGURES........................................................................................................... 12
ABSTRACT....................................................................................................................... 13
CHAPTER 1: INTRODUCTION........................................................................................... 14
  Previous Research......................................................................................................... 17

CHAPTER 2: THE STRUCTURAL SIGNIFICANCE OF THE TRANSITION TO PARENTHOOD ................................................................. 24
  Role Transition and Network Transformation......................................................... 24
  Structural Location as a Mediator of Network Transformation............................... 27
  Transition to Parenthood Timing.............................................................................. 27
    Early Parenthood...................................................................................................... 28
    Delayed Parenthood................................................................................................. 30
    Off-Time Parenthood and Friendship Ties.............................................................. 31
    On-Time Parenthood............................................................................................... 32
  Predicted Associations between Transition Timing and Structural Features of Parents' Networks ........................................................................................................... 33
  Summary of Timing as Structural Location............................................................... 34
  Patterns Associated with Gender............................................................................. 35
    Childrearing and Network Ties................................................................................ 37
    Labor Force Participation......................................................................................... 38
    Domestic Work and Child Care.............................................................................. 40
    Gender Role Ideology.............................................................................................. 41
  Summary of Patterns Associated with Gender......................................................... 43
  Predicted Associations between Gender and Structural Features of Parents' Networks ........................................................................................................... 43
  Patterns Associated with Family Form.................................................................... 45
    Relationship Status.................................................................................................. 45
    Children.................................................................................................................... 46
  Predicted Associations between Family Form and Structural Features of Parents' Networks ........................................................................................................... 48
  Ethnicity..................................................................................................................... 49
    Predicted Associations between Ethnicity and Structural Features of Parents' Networks ........................................................................................................... 51
TABLE OF CONTENTS – Continued

Outcomes of Network Transformation .................................................. 52
Postpartum Depression/Subjective Well-being ....................................... 53
Network Transformation and the Heightening of Gender Differentiation ....... 55

CHAPTER 3: RESEARCH METHODS ....................................................... 57

Data Requirements .............................................................................. 57
The Ideal Data: A Prospective Longitudinal Study .................................. 59
An Acceptable Alternative: The Retrospective Longitudinal Study .......... 63
Research Design Summary ................................................................... 66
Sampling Frame .................................................................................. 68
Survey Instrument and Measures ......................................................... 75
Measures of Network Characteristics .................................................. 76
Measures of Subjective Well-being ...................................................... 80
Measures of Gender ............................................................................ 81
Additional Survey Features and Measures .......................................... 83
Survey Development ........................................................................... 85
Administration .................................................................................... 86
Coding and Data Entry ........................................................................ 90
Sample Features .................................................................................. 90
Size ...................................................................................................... 90
Composition ....................................................................................... 92
Missing Data ....................................................................................... 96
Summary .............................................................................................. 99

CHAPTER 4: THE TRANSITION TO PARENTHOOD AND SOCIAL NETWORKS ......................................................... 101

Network Size and Memory Decay ....................................................... 102
Network Size and the Transition to Parenthood .................................... 104
OLS Regression Models ....................................................................... 107
Regressions of Network Size Just before Parenthood and One Year Later ............................................................................. 110
Regression of the Change in Network Size .......................................... 114
Contact Frequency and the Transition to Parenthood ......................... 118
Regressions of Contact Volume Just before Parenthood and One Year Later .............................................................................. 119
Regressions of the Change in Mean Contact Frequency ..................... 123
<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS – Continued</td>
</tr>
<tr>
<td>Proportion Kin and the Transition to Parenthood</td>
</tr>
<tr>
<td>Regressions of Proportion Kin Just before Parenthood and One Year Later</td>
</tr>
<tr>
<td>Regressions of the Change in Proportion Kin</td>
</tr>
<tr>
<td>Proportion Female and the Transition to Parenthood</td>
</tr>
<tr>
<td>Regressions of Proportion Female Just before Parenthood and One Year Later</td>
</tr>
<tr>
<td>Proportion Friend and the Transition to Parenthood</td>
</tr>
<tr>
<td>Proportion Coworker and the Transition to Parenthood</td>
</tr>
<tr>
<td>Regressions of Proportion Coworker Just before Parenthood and One Year Later</td>
</tr>
<tr>
<td>Regression of the Change in Proportion Coworker</td>
</tr>
<tr>
<td>Network Density and the Transition to Parenthood</td>
</tr>
<tr>
<td>Regressions of Network Density Just before Parenthood and One Year Later</td>
</tr>
<tr>
<td>Summary</td>
</tr>
<tr>
<td>Gender Effects</td>
</tr>
<tr>
<td>Timing Effects</td>
</tr>
<tr>
<td>Relationship Status</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
</tr>
<tr>
<td>Gender Role Ideology</td>
</tr>
<tr>
<td>Conclusion</td>
</tr>
<tr>
<td>CHAPTER 5: THE SOCIAL NETWORKS OF PARENTS WITH YOUNG CHILDREN</td>
</tr>
<tr>
<td>OLS Regression Models</td>
</tr>
<tr>
<td>Demographic Characteristics and Background Variables</td>
</tr>
<tr>
<td>Parenting Context</td>
</tr>
<tr>
<td>Network Size among Parents of Young Children</td>
</tr>
<tr>
<td>Contact Frequency among Parents of Young Children</td>
</tr>
<tr>
<td>Network Composition among Parents of Young Children</td>
</tr>
<tr>
<td>Proportion Kin</td>
</tr>
<tr>
<td>Proportion Female</td>
</tr>
<tr>
<td>Proportion Friend</td>
</tr>
<tr>
<td>Proportion Coworker</td>
</tr>
<tr>
<td>Proportion Neighbor</td>
</tr>
<tr>
<td>Network Density</td>
</tr>
<tr>
<td>Summary and Conclusions</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS – Continued

Age of Youngest Child......................................................................................... 198
Paid Child Care..................................................................................................... 200
Hours with Children............................................................................................ 203
Hours Doing Chores............................................................................................. 204
Number of Children............................................................................................. 205
Conclusion............................................................................................................. 206

CHAPTER 6: PARENTHOOD, SOCIAL NETWORKS, AND SUBJECTIVE WELL-BEING.................................................................................................................. 208

Duration of Postpartum Depression................................................................. 210
Current Subjective Well-being.......................................................................... 216
Conclusion............................................................................................................. 220

CHAPTER 7: SUMMARY, DISCUSSION, AND CONCLUSION................................. 222

Methodological Findings.................................................................................... 223
Empirical Findings............................................................................................. 224
Discussion.............................................................................................................. 227
Thinking about Gender....................................................................................... 228
Thinking about Ethnicity...................................................................................... 231
Research Agendas............................................................................................... 234

CHAPTER 8: TABLES.......................................................................................... 237

CHAPTER 9: FIGURES......................................................................................... 279

APPENDIX A—SURVEY INSTRUMENT................................................................. 282

REFERENCES...................................................................................................... 300
LIST OF TABLES

Table 3-1. A comparison of the study sample of parents with the general population of Pima County residents, ages 18-54 ........................................ 237
Table 4-1. Means and standard deviations for dependent variables in retrospective analyses, by gender .................................................. 238
Table 4-2. Means and standard deviations for independent variables in retrospective analyses, by gender ............................................... 239
Table 4-3. Coefficients from the regression of network size just before the birth of the oldest child ......................................................... 240
Table 4-4. Coefficients from the regression of network size around the time of the oldest child's first birthday ........................................... 241
Table 4-5. Coefficients from the regression of the change in network size at the transition to parenthood .................................................. 242
Table 4-6. Coefficients from the regression of contact volume just before the birth of the oldest child ......................................................... 243
Table 4-7. Coefficients from the regression of contact volume around the time of the oldest child's first birthday ........................................... 244
Table 4-8. Coefficients from the regression of the change in mean contact frequency at the transition to parenthood ................................. 245
Table 4-9. Coefficients from the regression of proportion kin just before the birth of the oldest child ......................................................... 246
Table 4-10. Coefficients from the regression of proportion kin around the time of the oldest child's first birthday ....................................... 247
Table 4-11. Coefficients from the regression of the change in proportion kin at the transition to parenthood .............................................. 248
Table 4-12. Coefficients from the regression of proportion female just before the birth of the oldest child ............................................... 249
Table 4-13. Coefficients from the regression of proportion female around the time of the oldest child's first birthday ................................. 250
Table 4-14. Coefficients from the regression of proportion friend just before the birth of the oldest child ................................................... 251
Table 4-15. Coefficients from the regression of proportion friend around the time of the oldest child's first birthday ................................... 252
Table 4-16. Coefficients from the regression of proportion coworker just before the birth of the oldest child ............................................. 253
Table 4-17. Coefficients from the regression of proportion coworker around the time of the oldest child's first birthday ............................. 254
Table 4-18. Coefficients from the regression of the change in proportion coworker at the transition to parenthood ................................. 255
LIST OF TABLES -- Continued

Table 4-19. Coefficients from the regression of network density just before the birth of the oldest child.......................................................... 256
Table 4-20. Coefficients from the regression of network density around the time of the oldest child's first birthday........................................ 257
Table 5-1. Means and standard deviations for dependent variables in cross-sectional analyses, by gender......................................................... 258
Table 5-2. Means and standard deviations for independent variables in cross-sectional analyses, by gender....................................................... 259
Table 5-3. Coefficients from the regression of network size.................................................................................................................. 260
Table 5-4. Coefficients from the regression of contact volume .............................................................................................................. 261
Table 5-5. Coefficients from the regression of women's contact volume ................................................................................................ 262
Table 5-6. Coefficients from the regression of mean contact frequency ................................................................................................... 263
Table 5-7. Coefficients from the regression of proportion kin............................................................................................................... 264
Table 5-8. Coefficients from the regression of proportion friend........................................................................................................ 266
Table 5-9. Coefficients from the regression of proportion coworker...................................................................................................... 267
Table 5-10. Coefficients from the regression of proportion neighbor .................................................................................................. 268
Table 5-11. Coefficients from the regression of network density ........................................................................................................ 269
Table 6-1. Means and standard deviations for dependent variables in analysis of mental health status, by gender.................................................. 271
Table 6-2. Means and standard deviations for independent variables in analysis of postpartum depression, by gender.................................................. 272
Table 6-3. Coefficients from the regression of duration (in months) of postpartum depression ........................................................................ 273
Table 6-4. Means and standard deviations for independent variables in analysis of current subjective well-being, by gender........................................ 274
Table 6-5. Coefficients from the regression of Edinburgh Postnatal Depression Scale score........................................................................... 275
Table 7-1. A summary of predicted relationships and data outcomes................................................................. 277
LIST OF FIGURES

Figure 4-1. Transition timing and women's network size just before parenthood and one year later................................................................. 279
Figure 7-1. Pre- and post-parenthood network size, by gender..................... 280
Figure 7-2. Pre- and post-parenthood network composition, by gender........... 281
ABSTRACT

Using a random sample of 368 parents of young children in Pima County, Arizona, this study examines the implications of childrearing for social networks. In addition to cross-sectional network data, the study includes retrospective measures of networks at two periods: just before the birth of the respondent's oldest child, and around the time of the oldest child's first birthday. These retrospective longitudinal data permit a detailed assessment of stabilities and changes in parents' social contact patterns, and a discussion of their implications.

Expectant parents occupy distinct structural positions related to the timing of parenthood in the life course, relationship status, ethnicity, and gender. In the year following parenthood, many of these differences are attenuated, suggesting that parenthood is itself a unique social position that may reduce the distinguishing power of other structural parameters. But while the networks of parents are, as a whole, more similar to each other than those of expectant parents, gender differences in network characteristics appear to be somewhat enhanced over the transition to parenthood. Cross-sectional data show that involvement in the domestic sphere, rather than sex-category, is especially predictive of network structure. The patterns identified here will lead to more precise conceptualization and measurement of gender processes, as roles in work, marriage, and parenting gain increasing flexibility.
CHAPTER 1: INTRODUCTION

A quarter-century ago, during his term as president of the American Sociological Association, Peter Blau sought to convince sociologists that the focus of inquiry ought to be "the various forms of differentiation among people, their interrelations, the conditions producing them, and their implications" (Blau 1974: 616). Many sociologists, especially social network researchers, have attended to Blau's ideas, and focused attention on relational properties rather than individual attributes. Accordingly, in this dissertation, I conduct a sociological analysis linking the transition to parenthood to a number of social network properties.

People can be differentiated by the formal properties of their social networks, which crucially shape the amount and kinds of information and other resources to which they have access. Social network structure influences the social roles or positions people occupy, and is in turn influenced by them. Though the role of parent is widely experienced, little is known about how parenthood influences social contacts—or more precisely, about how the various roles people occupy mediate the relationship between parenting and social networks. The principle objective of this study is to investigate parenthood as a condition producing structural transformation in contact patterns. In addition to investigating parenthood as a source of microstructural change, the dissertation also seeks to explore the links between social network transformation and its possible implications, including postpartum depression and enhanced gender differentiation.
Gender hasn't conventionally been viewed as an outcome in sociology or any other discipline. Rather, most researchers treat gender as a stable, dichotomous attribute of individuals (i.e., an exogenous variable). However, there are sociological traditions (see West and Zimmerman 1987: 126) in which gender is recognized as a process and an outcome of "a complex of socially guided perceptual, interactional, and micropolitical activities that cast particular pursuits as expressions of masculine and feminine 'natures'."

Somewhat similarly, the structural approach (e.g., Fischer and Oliker 1983; Moore 1990) suggests gender differences result from subtle differences in patterns of social relationships, which can affect "perceptions, beliefs, resources, and contingencies" (Smith-Lovin and McPherson 1993: 223). In this view, gender is seen as an ongoing product of patterns of association. Childrearing, to the degree that it produces a fundamental restructuring of patterned interactions, may be a crucial bottleneck in the process by which gender differences are created and maintained over the life course. This research explores that possibility.

The dissertation also investigates the relationship between particular patterns of association and postpartum depression, the variants of which are believed to affect between up to 80 percent of childbearing women.¹ Most research in the etiology of

¹ There are three types of depressive reactions described in the literature. The most severe (and uncommon) is psychotic depression, thought to affect only 1 or 2 percent of women. A moderate postpartum depression is thought to affect 10-20 percent of women, while the least severe and most transitory variant (termed "baby blues") is believed to affect 50-80 percent of women (see Dobie and Walker 1992; Whiffen 1992; Taylor 1996).
postpartum depression emphasizes either a biological/hormonal or psychological orientation (see Stern and Kruckman 1983). However, the stress and coping tradition in medical sociology has also generated a number of studies of depression in the postpartum period (see Tietjen and Bradley 1985; and especially Collins et al. 1993). Sociological perspectives emphasize the role social factors play both in exposing individuals to health risk and in increasing (or decreasing) individuals' vulnerability to risk once they are exposed. Among the most important of these factors is social support. Because strong, confiding ties to others help individuals create and maintain rewarding identities, social support can be a critical mediator in illness-producing conditions (Brown and Harris 1978). For persons with contracted or disrupted social networks, access to social support may be blocked, making depression more likely. Thus, while not denying a biological component to postpartum depression, this study explores its social structure correlates.

As a structural analysis of the transition to parenthood and the childrearing phase of the life course, this study is concerned with distinctive patterns of relations associated with childrearing. In order to assess these patterns this research includes three measures of mothers' and fathers' social networks, each of which refers to a different point in the childrearing experience: just before a new baby is introduced into the household, again at one year postpartum (or around the time of the child's first birthday), and yet again at some later time in the childrearing process (coinciding with the date of the survey administration). These retrospective longitudinal data permit a dynamic analysis of childrearing's impact on parents' networks.
Of course, social networks are shaped by many factors other than childrearing (e.g., Marsden 1987), and so the study controls for a host of basic demographic factors including age, marital status, employment status, religion, education, geographic moves, ethnicity, and so forth. The study is distinctive, however, in that it also assesses the contribution of factors peculiar to the parenting experience, such as transition-to-parthood timing, gender role ideology, parity, ages of children, use of paid child care, and daily hours spent doing domestic work and child care. The objective is to understand the relative importance of these factors in shaping parents' patterns of association.

Previous Research

Although there have been many previous studies of the transition to parenthood, few of them could be accurately characterized as structural analyses. That is, few studies explicitly consider patterns of parents' relationships with others, and the consequences of these patterns. In fact, Gottlieb and Pancer (1988) uncovered only a handful of studies pertaining to social networks and the transition to parenthood in their review of this field—and most of these focus on the role of perceived social support in helping parents adjust to their new roles in caring for babies (e.g. Crnic et al. 1983; Cutrona 1984; Hopkins et al. 1984; Nuckolls et al. 1972). In fact, descriptive studies are so rare that very little is known about how parents' social networks are modified by their parenting experience.

It is certainly not the case that researchers believe childrearing to be inconsequential for social networks. Belsky and Rovine, for example, comment that with
the transition to parenthood:

The network itself undergoes certain changes in size, composition, and function as a result of the changing needs and identities of the new parents. Certain actors in the couple's preparenthood network may withdraw....Others, formerly on the margins of the couple's network, may gradually occupy more central positions(1988: 235).

Belsky and Rovine's statement appears to be well-informed. But if it is informed, then it is informed more by anecdote and common sense than it is by a body of systematic research, for only two studies to date have used longitudinal data to track the network dynamics of the transition to parenthood, and both suffer from a number of important limitations.

Belsky and Rovine (1984) examined the composition and contact frequency of 72 married couples' networks at three points in time beginning in the last trimester of pregnancy and ending nine months postpartum. Social networks were measured by asking respondents to name up to eight significant others in their lives (people whom the couple felt close to and knew well). They found that while the number of family members in couples' networks decreased over the period, contact frequency with family members increased, especially among women. Contact with other parents of young children also increased over the observed time period.

A second study (McCannell 1988) tracked the social networks of 39 women who were either married or living with a partner. Beginning in the last trimester of pregnancy and then twice again within one year postpartum, McCannell asked the women, "with whom do you engage in social activities?". She found that network size decreased significantly over the observed time period. And while the proportion kin in the women's
networks decreased, frequency of contact with kin increased.

To date, these are the only published studies illustrating the social network dynamics of the transition to parenthood using longitudinal data. They converge on similar findings regarding parenthood's network significance, suggesting that after having a baby, parent's social networks tend to become smaller and perhaps more family-centered. But since both studies suffer from a number of limitations, these findings can only represent a launching point for future research. For example, neither study can adequately address the issue of gender differences. Belsky and Rovine (1984) emphasized features of couple (rather than individual) networks and McCannell (1987) studied only women. But since childrearing responsibilities are not traditionally shared by both parent's equally, it would seem logical to expect that whatever effect childrearing has on social networks would not be the same for both parents. More research attending to gender-specific effects is needed.

Another limitation of most research in this area is a lack of conceptual clarity, evident in an often blurry distinction between social network structure and content (e.g., social support). A social network is a set of relations between actors. Each actor is a node in the network, and ties between nodes signify relationships that transmit particular kinds of information (Knoke and Kuklinski 1982). The network's content, which may define the network for measurement purposes, is the particular kind of information transmitted. For instance, a discussion network (e.g., Marsden 1987) usually refers to the set of actors with whom an individual discusses important matters, while a social support
network refers to the set of actors from whom an individual receives social support. The set of actors is usually ascertained through the use of a name generator—a question specifically designed to elicit names of actors in the same equivalence class. But many studies of "social support networks" measure the perceived quality of social support, rather than network structure per se (e.g., Ishii-Kuntz and Seccombe 1989), or they simply assume that relationships with particular alters (such as family members) will transmit particular information (such as social support) (e.g., Belsky and Rovine 1984). This lack of conceptual clarity reduces the strength of any conclusions we might otherwise be able to draw about childrearing's significance for either social network structure or social support.

Finally, the studies summarized here are based on small non-representative samples. Belsky and Rovine (1984) solicited 72 volunteer couples from a large obstetrical practice and at a community sponsored childbirth education class. McCannell's (1988) 39 respondents were also drawn from "early-bird" childbirth groups. Both authors stress that conclusions drawn from their research should be interpreted with caution, and that research with more representative samples is necessary.

Two other studies of parenthood and social networks redress the limitations noted above. The first (Hammer et al. 1982) used a subsample (n=315) of respondents who were childbearing age drawn from Claude Fischer's Northern California Communities Study (see Fischer 1982). Using cross-sectional data to compare parents with non-parents, the researchers were able to infer a number of network features associated with
childrearing. They noted a greater emphasis on kin connections and lower contact frequency among the parents. They also observed reductions in network size among non-working women in the lowest social class.

A second study performed by Munch, McPherson and Smith-Lovin (1997) compared the social networks of parents with children of various ages using a probability sample of Nebraska residents. Social networks were measured using the General Social Survey network name generator, "With whom do you discuss important matters?". They found that the age of a respondent's youngest child had distinctive correlates in network structure. They also found gender-differences in the effects of age of youngest child on various network characteristics. For example, having a young child was associated with smaller networks and reduced contact frequency among women, but not among men. On the other hand, having a young child was associated with significant compositional differences among men--most notably, with an increase in proportion kin. For both men and women, these effects were most pronounced among respondents with three-year-old children.

The above studies are conceptually clear in that they focus strictly on formal network structure. They are based on large, representative samples and attend to gender differences. They thus address several of the important weaknesses characterizing previous research in this area. However, despite these advances, our understanding of childrearing's impact on social networks remains insufficient on several counts. Most importantly, the studies lack longitudinal data. We must infer the network consequences
of the transition to parenthood, since no over-time data from a representative sample of parents exists to examine this issue directly. Additionally, due to data constraints, no previous study has been able to control for important factors that might crucially mediate in the relationship between childrearing and networks, such as the use of paid child care. And finally, while these studies have produced the most complete description of parents’ social networks to date, none attempted to examine any consequences of particular network arrangements. The present study is designed to overcome these limitations.

In this dissertation, I present the most systematic study of parenthood’s structural significance performed to date. In Chapter 2, I lay the groundwork by conceptualizing parenthood in structural terms. Using Blau’s (1977) assumption that associations depend on opportunities for social contact, I generate a series of predicted relationships between parents’ structural positions and their network characteristics. I outline the research design and survey methodology utilized to collect the cross-sectional and retrospective longitudinal data in Chapter 3. Chapter 4 presents results from analyses using the longitudinal data. This chapter examines and compares respondents' social networks pre- and post-parenthood, giving particular attention to the influence that transition-to-parenthood timing and relationship status have in parental network structure and transformation. The next chapter reports results from a series of parallel analyses with the cross-sectional network data, reported at the time of survey administration. Due to the availability of multiple indicators in the cross-sectional component, contextual factors in childrearing and involvement in the domestic sphere take on increasing importance in this
discussion. Chapter 6 explores the link between properties of social networks and psychological well-being. Finally, in Chapter 7, I summarize the results of this study and discuss some of its broader implications for research and theory.
CHAPTER 2: THE STRUCTURAL SIGNIFICANCE OF THE TRANSITION TO PARENTHOOD

No single study can overcome all of the limitations in previous research on the structural significance of childrearing. But a series of well-designed studies can gradually redress previous inadequacies, building a set of findings from which stronger conclusions can eventually be drawn. The present study represents a step in that direction. However, it is first necessary to lay some groundwork in the form of a more explicitly structural conceptualization of the transition to parenthood and the childrearing phase of the life course. The structural conceptualization outlined in this chapter will permit the development a consistent and logical approach in discussions of: a) why the transition to parenthood is expected to be accompanied by some degree of network transformation; b) how and why particular forms of network structure and transformation are expected to vary across different role positions and structural locations; and c) what the consequences of parents' network structure and transformation are expected to be.

Role Transition and Network Transformation

First, why would we expect the transition to parenthood to be accompanied by some degree of network transformation? Accounts of network transformation following the transition to parenthood vary in their emphases, but most cite the importance of the following factors: time constraints, changing needs, and changing identities. These factors are crucially interrelated. However, the concept of role transition sheds some light on how each of them might contribute to structural transformation in parents' social
networks.

Every social role carries with it certain behavioral expectations, and every individual performs several roles. These roles structure and maintain both individual identity and interpersonal relations in society. Roles position the individual with respect to social circles of others who grant certain rights and expect certain duties (Simmel 1955; Znaniecki 1965). Transformations in roles thus affect social interaction, behavior, and identity.

The transition to parenthood represents much more than simply the addition of a role to an individual's role set. But even if it were nothing more than this, the implications would be significant since the behavioral expectations for the role of parent are quite substantial. Infants depend on others for their very survival, and during the first few years of life, children require nearly constant supervision. The sheer time constraints alone of parenting are enough to produce changes in parents' patterns of social interaction. These changes would likely result in greater contact with others who are involved with the child (e.g., relatives, child care providers, physicians, etc.) and reduced contact with those who are not involved with the child (e.g., friends, coworkers, etc.).

The transition to parenthood may signify other role outcomes as well, each of which might be manifested in unique network implications. For instance, role strain and role conflict might result if, as they often are, the expectations of the parent role and other roles are contradictory. Women seem more prone to experience this conflict, since the parent role is more salient for women than men (Simon 1992). Negotiating conflicts
between roles, such as between the worker and mother roles, may require dropping non-
essential friendships, activities, or associations. Sometimes women reduce their
involvement in the occupational sphere, or drop out of it entirely. But any of these
strategies will signify a role loss, carrying with it certain emotional (e.g., Fuchs 1988) and
interactional costs, the result of which may be a reduction in the number and variety of
network contacts. To the extent that such tendencies are gendered, the resulting contact
patterns may further enhance gender differentiation.

Thus the transition to parenthood is accompanied by a substantial array of
behavioral expectations which facilitate some forms of interaction and impede others. In
negotiating this role transition, parents may seek out certain alters for particular kinds of
information. At the same time, they may reduce contact with alters who do not help them
fulfill their role requirements. These processes may be intentional or unintentional, and
they may be initiated by parents, by their network alters, or by a combination of both
parties.

Since established role relations are resistant to disruption (see Blau 1977),
behavioral expectations for roles may remain constant, even as changing circumstances
prevent those expectations from being fulfilled. For example, there may be an
understanding between an employer and her salaried employee that over-time hours are an
occasional requirement of the job. When that employee becomes a parent, however, even
occasional over-time hours may involve significant coordination efforts. It would be
difficult for the parent not convey in some manner that priorities have shifted. Occupants
of roles, both parents and network alters, may feel awkward, isolated, or pressured under these kinds of changing circumstances, which may lead to changing patterns of relations and interaction. Together, these are the sorts of factors that contribute to the structural significance of the transition to parenthood.

**Structural Location as a Mediator of Network Transformation**

The significance of parenthood as a source of microstructural change has been established in general terms. However, more specific predictions can be made regarding how network transformation will be experienced differently for persons in particular social positions or structural locations, which are characterized by patterned access to different kinds of information and other resources. This study explores the influence of several such factors, including: the timing of parenthood within the life course, gender (including attitudes about gender roles as well as behavioral manifestations of gender in the form of paid work and domestic work), family structure, and ethnicity. Some of these factors may be associated with particular social network arrangements in their own right, which would then modify the experience of structural transformation. Outcomes of the transition to parenthood can thus be described in terms of patterned structural transformation.

**Transition to Parenthood Timing**

In the following sections I discuss some of the particular social network characteristics that might be associated with transition timing. Before doing so, however, it may be helpful to briefly define a few terms. The life course consists of a series of age-graded patterns embedded in social institutions and subject to historical change (Elder.
Modell, and Parke 1993). The transition to parenthood is widely experienced, but increasingly less age-graded, as the upper age-limits are constantly being extended with new reproductive technologies. Nevertheless, the majority of women still bear their first child before the age of 30, and in that sense we can somewhat arbitrarily define a transition to parenthood occurring after the age of 30 as "delayed," relative to the broad age-graded pattern. Similarly, we can term "early" a transition to parenthood that occurs before age 21, and "on-time" those that occur between the ages of 21 and 30. In the discussion that follows, I begin by comparing early and late parents, since the contrast between them makes the account more vivid. Only after the network implications of off-time parenthood are presented do I move to a discussion of parenthood in its on-time variant.

Early Parenthood

An important initial difference between younger and older parents is likely to be their respective positions both within a particular set of interpersonal relations and within the broader social structure. For example, persons experiencing the transition to parenthood at a relatively young age are unlikely to be firmly embedded in occupational networks. Instead, friends and kin will be central in their relationships and identities. As a result, overall network size among early parents is likely to be smaller, as compared to on-time or delayed parents.

Early parenthood will likely affect patterns of social contacts with both friends and kin. Early parenthood will alter association with friends to the extent that the shared
activities that were the basis for the friendship (e.g., school, jobs, and recreational pursuits) may be restricted following the onset of parenthood. Blau’s (1977: 281) axiom that "social associations depend on opportunities for social contact" has a very clear application here. Though young women are no longer expelled from high school for pregnancy, it is still the case early parenthood alters the social landscape by hastening the onset of adult responsibilities. Of course, the degree to which an early parent’s opportunities for association with friends are restricted depends on a number of factors, including involvement in child care and other actors in the friendship network. Because young parents are less likely than older parents to be married or in a committed relationship, child care responsibilities may rest almost entirely upon a young mother. In this case the degree to which opportunities for contact with friends are restricted would be gendered (very restricted for young mothers, not very restricted for young fathers).

With the onset of parenthood, early parents may be perceived as more socially distant from their nonparent friends, thus reducing the prevalence of association (see Blau’s first axiom, 1977: 281). But on the other hand, friendship ties are an important source of information (e.g., norms) about fertility behavior (Fox, Fox, and Frohardt-Lane 1982; Voydanoff and Donnelly 1990). To the extent that actors in an early parent’s network of friends share similar information, there will likely be others in the network who also experience relatively early pregnancy or parenthood. Thus, early parenthood may result in the new parent’s omission from certain social circles and activities, but will mainly result in a readjustment of friendship relations to favor those among whom early
parenthood is not disapproved.

Early parenthood will likely strengthen ties to kin. Compared to their counterparts who delay parenthood, early parents have fewer resources, and they may therefore require more advice, practical assistance, and financial help in negotiating the role transition to parenthood. Unlikely to be either married or financially independent, young parents may live with family members and may rely on them for help with child care and other matters. Thus, prior to the transition to parenthood, younger parents are expected to occupy a structural location emphasizing peer and kin ties. After the transition, this location is expected to become even more kin-intensive.

Delayed Parenthood

The structural location of delayed parents is distinguished from that of early parents by more prevalent ties to work, associations, and neighbors, and less prevalent ties to kin. Occupational identities are strong, and are preserved through existing occupational ties. Delayed parents are also more financially secure, affording them the opportunities of day care and other services which help to facilitate their multiple roles. While parenthood is unlikely to enhance occupational ties, its effect should not be particularly detrimental to them unless the new parent decreases involvement in work (e.g., by leaving the work force, taking a different job, or cutting down on hours). Thus delayed parents are expected to occupy a structural location with relatively greater emphasis on coworker ties, and this pattern of association is not expected to be dramatically altered with the onset of childrearing.
While delayed parents are expected to be more work-centered than early parents, they are also less kin-centered. We can expect this result for several reasons. First, delayed parenting is associated with greater educational and occupational advancement, both of which often necessitate geographic mobility. As a result, older parents may be less likely to reside in the same location as their family of origin. Also, the parents of delayed parents are older, and thereby more likely to be functionally impaired or even deceased (see Walter 1986 for discussion of these matters). As a family event, the birth of a child is generally expected to draw kin more deeply into existing social relations. However, delayed parents may face a distinctive set of contingencies which diminishes this effect. In comparison to early and on-time parents, we can thus expect delayed parents to have social networks which are less kin-centered, both initially and following the transition to parenthood.

Off-Time Parenthood and Friendship Ties

The likely effects of early and delayed parenthood on network ties to friends are less clear. Because teen parenthood can result in social disapproval, and can restrict social activity, the transition to parenthood might precipitate reduced embeddedness in peer relations among young parents. However, this effect may not be long-lasting, because social disapproval may be only minimal and young parents can easily form new friendships with other young parents. Further, most young people expect to experience parenthood eventually, so young parents may be retained in social networks because of their ability to provide valuable information about an anticipated life course status. While the social
networks of early parents may initially become less peer-centered, peer relations may be easily reconstituted with a changing definition of peer.

Delayed parents' social networks are less likely to include other parents. With a peer group consisting of other nonparents, older parents may enjoy very adult forms of socializing, such as attending performances or participating in highly-skilled recreational activities. To the extent that parenthood restricts these activities, it may reduce opportunities for contact with friends. Additionally, a selection effect may occur over time such that, in contrast to young people, middle-aged nonparents may not necessarily expect to achieve the status of parent, and they may not retain the "possible self" of parent in their identity (Antonucci and Mikus 1998). When delayed parenthood occurs, the social distance between the new parents and their childless friends is thus greatly increased, reducing the prevalence of association. So while the structural location of late parents may initially be characterized by prevalent ties to friends, these ties may become tenuous following the transition to parenthood. However, to the extent that peer ties are also coworker ties, this result will not be nearly as dramatic, as coworker ties are likely to be durable, for reasons described above.

*On-Time Parenthood*

The benefits associated with on-time parenting may accrue as a result of its relatively modest effects on structural location. On-time parents are likely to have some involvement in the occupational sphere, and the ties there are likely to be durable. Parents who drop out of the labor force for a time will experience a period of network adjustment.
but will likely find themselves surrounded by other parents in similar circumstances. And
while they are not exceedingly dependent on kin ties (having usually married and set up
house somewhere), on-time parents will generally find their kin available to them when
needed. Most significantly, on-time parents engage in family formation around the time
when the majority of their peers do. While restricting some forms of social activity,
parenthood does not compete much with existing friendships, but instead may strengthen
them as an additional commonly-shared experience.

Predicted Associations between Transition Timing and Structural Features of Parents'
Networks

Using ideas raised in the above discussion, the following predictions are made:

1. **Network Size:**

   A. The pre-parenthood network size of on-time parents will be larger than that of
      early parents and smaller than that of delayed parents.

   B. Any reductions in network size that accompany the onset of parenthood onset will
      be smaller among on-time parents as compared to off-time parents.

2. **Kin Composition:**

   A. The kin composition of on-time parents will be less than that of early parents and
      greater than that of delayed parents.

   B. Any increases in kin composition that accompany the onset of parenthood will be
      greater among early parents and smaller among delayed parents, relative to on-time
      parents.
3. **FRIEND COMPOSITION:** No prediction is made about initial differences in friend composition among the three timing groups. However, any reductions in friend composition that accompany the onset of parenthood will be smaller among on-time parents as compared to off-time parents.

4. **COWORKER COMPOSITION:**
   
   A. The coworker composition of on-time parents will be greater than that of early parents and less than that of delayed parents.

   B. Any decreases in coworker composition that accompany the onset of parenthood will be relatively greater among on-time parents as compared with off-time parents.

**Summary of Timing as Structural Location**

Previous theory has suggested that benefits and costs associated with early, on-time, and late parenting result from conforming to or violating timing norms (e.g., Fox et al 1982) or from differential access to important resources (e.g., Furstenberg 1976). Conceptualization of the transition to parenthood in terms of structural location does not negate either of these mechanisms, but rather, pushes them further by specifying how these processes might occur. Timing norms are enforced primarily through the homophily principle (the tendency of similars to associate) which can result in a restructuring of peer networks. On-time parents are best able to maintain friendship ties because parenthood is a common experience within the existing interpersonal environment. Social networks of early parents, on the other hand, may have to be reorganized to develop ties with other parents. Delayed parents may find peer retention difficult, unless peer ties are multiplex.
The structural location approach can also accommodate resource theories by specifying how particular patterns of relations might facilitate or impede access to certain kinds of information and resources. With respect to many important kinds of social resources early parents are critically challenged. Educational attainment may be cut short, resulting in occupational careers without much chance of upward mobility. Early parenthood could thus embed younger parents into restricted structural positions, with little opportunity for change or growth (Furstenberg 1976). In contrast, delayed parents are likely to have accomplished their educational goals and to have established their occupational careers. The greater financial and educational resources available to delayed parents may be somewhat counterbalanced, however, with decreased social support from peers and kin. The structural location of on-time parents appears to maximize material and social resources.

Patterns Associated with Gender

Clearly useful in reconceptualizing the significance of timing for the transition to parenthood, the structural location approach can clarify the importance of gender as well. While gender often is used as a term to describe patterned attributes of persons, it is perhaps most dramatically manifested in patterns of relationships; that is, as structural location. Employing this conceptualization, gender differences are understood in terms of differences in "opportunities for social contact" (Blau 1977), affecting "perceptions, beliefs, resources, and contingencies" (Smith-Lovin and McPherson, 1993: 223).

There is a long tradition in network research documenting distinctly gendered
patterns of social contact. For example, Bott's (1957) ethnographic research suggests that density in social networks is associated with segregation in the husband/wife role relationship. When marital roles were arranged in a traditional, gender-segregated manner (as they tended to be among the working-class families she studied), wives' contacts favored a relatively dense circle of female kin and neighbors, while the social networks of husbands emphasized male coworkers and friends. Similarly, Wellman's (1985) ethnographic study highlights the different networking styles of 'reproducers' (full-time homemakers), 'double loaders' (women who work for pay in addition to doing most of the domestic work at home), and other groups of men and women. Wellman found distinctive patterns of association among the groups he observed. Double loading women had relatively smaller, more limited networks, and little free time to foster contacts outside of work, whereas homemakers had prevalent ties to friends and neighbors, though none to coworkers. Emerging from these ethnographic studies is the structuralist argument: "We propose that the differing positions of women and men in the work force, in marital roles, and in parenthood create different sets of opportunities for and constraints on friendship-building" (Fischer and Oliker 1983: 130). Gradually, this sort of argument has become the basis for much of the theory and research on gender differences in social networks, including the study reported here (see also Moore 1990; Smith-Lovin and McPherson 1993; Munch et al. 1997).

While gender differences in structural location accumulate gradually over the life course, childrearing may be a crucial bottleneck in the process by which gender differences
are created and maintained—a time of escalated accumulation (see Smith-Lovin and McPherson 1993). Although men cannot gestate or lactate, biological differences alone cannot account for men's and women's differential involvement in childrearing. Instead, powerful social forces, such as the ideology of separate spheres and the motherhood mandate, have traditionally operated to construct a social reality in which domestic concerns in general (and childrearing in particular) are viewed as women's work. As a result, childrearing is largely a gendered task, in which women exhibit greatest involvement and for which they assume greatest responsibility. To the extent that it affects patterns of social relationships, differential involvement in childrearing will produce differential effects upon social networks. To the extent that childrearing is a gender-segregated task, childrearing's effect on structural location will be gender-specific.

Childrearing and Network Ties

Childrearing may affect certain kinds of social relationships more than others. Embedded in the institutions of family and work, kin and co-worker ties are fairly durable. That is, the institutional structures of family and work naturally facilitate social relations within them such that these relations become almost as permanent as the institutional involvement itself. As long as a person's membership in a family or a work organization is maintained, the kin and coworker ties fostered there may be relatively persistent.

Yet friendship ties are less likely to be sustained through institutional affiliations. In fact, very young children are demanding in ways that may detract from friendships. Relationships with childless peers in particular may suffer because the addition of a child
may reduce the field of commonly shared experiences, upon which the relationship is based. Relationships may also be challenged by the new parent's restrictions on activity. In getting together with friends, the new parent is limited to certain kinds of activities, and these are limited further still to certain times of the day. Moreover, friends cannot receive the full attention of new parents, since parents are typically bouncing, or jostling, or searching for stimulating objects to amuse a baby between diaper changes and feedings. Conversation and other activities are thus prone to frequent interruptions and other distractions. For these and other reasons, childrearing may disrupt existing patterns of friendship relationships. All else equal, greater involvement in childrearing will result in greater disruptions to friendship networks. And since women are typically more involved in the task of childrearing, childrearing's disruption to friendship networks is likely to be more severe for women than for men.

*Labor Force Participation*

The conventional pattern of women's labor force participation, in which women work until the birth of the first child and then leave the paid labor force until intense childrearing responsibilities have ceased (Elder 1974; Modell 1989), has given way somewhat in recent years to the double track, in which women pursue dual occupational and parental careers (Sørensen 1983). Childrearing's effect on social networks is likely to be mediated by these different patterns of labor force participation, which place new parents in qualitatively distinct structural locations.

The social networks of women who work outside the home, like those of most
men. are comprised at least partially of durable coworker ties. To the extent that work involvement remains uninterrupted, these coworker ties are not disrupted as a result of childrearing. However, when childrearing draws a parent out of the world of work, opportunities for contact with coworkers are (obviously) restricted. Social networks will thus decrease in size, or their composition will be rearranged to favor non-coworker ties such as those to peers and kin. Since peer relations may already be restricted at this time (for reasons described above), social networks may become increasingly kin-centered. Thus traditional patterns of women's labor force participation may lead mothers into social worlds that are increasingly kin-centered, while non-traditional patterns, such as the double track, may reduce the magnitude of these network adjustments. Still, the responsibilities of the worker and parent roles will weigh heavily on double-track mothers, reducing their ability to maintain peer ties, unless household and child care duties are more equitably divided among two parents.

Even when women remain in the paid work force, childrearing may exert gender-specific effects on structural location. For instance, in a sample of 186 job-changing programmers, personnel workers, real estate agents, and sales workers, Campbell (1988) found that having a child under age six was detrimental to women's occupational networks (in terms of size and status composition), but not to men's. Thus although continuous employment puts men and women in more structurally similar locations, primary responsibility for childrearing still exerts pressure on existent patterns of relationships. To the extent that childrearing is women's work, non-traditional patterns of labor force
participation cannot neutralize its effects on social relationships. Gendered patterns of social relationships continue to manifest themselves in a pronounced way at this crucial stage in the life course.

**Domestic Work and Child Care**

In addition to paid work outside the home, parents must negotiate the demands of household labor as well. The distribution of household tasks and child care remains highly gendered, despite the entrance of women into the paid work force (e.g., Presser 1984, Berk 1985). Ross (1987) identifies several factors positively associated with husbands' relative contribution to housework, including: less traditional beliefs about sex roles, education, wives' employment, and a smaller sex-gap in earnings. While the distribution of household labor may be more equitable than now than ever, it is far from equal, as 76% of wives employed full-time still do a majority of the housework (Ross 1987).

Traditional parenting styles which emphasize the differential involvement of men and women in childrearing may exacerbate this disparity. Rossi (1985) reports that new mothers approach parenthood with role embracement, while new fathers exhibit role distance. Mothers' involvement is thus obligatory, while fathers' remains voluntary (see LaRossa and LaRossa 1981), resulting in the distinctive roles of mothers as caregivers and teachers, and fathers as playmates (Parke and Stearns 1993). While traditional parenting styles emphasize the differential involvement of mothers and fathers (and hence childrearing's gendered effects on structural location), contemporary trends in parenting, such as the increased use of paid child care and egalitarian parenting styles, may reduce
the gendered nature of both the process and outcomes of parenting.

The implications of housework and child care for social networks are still being explored. Wellman (1985) for example, finds that the persons most involved in domestic work and child care (the 'reproducers') have a distinctive pattern of social associations that emphasizes friends, neighbors, and kin--persons likely to offer help and support to stay-at-home moms throughout the day. Women working outside the home have ties outside the domestic sphere, but because their non-working hours are restricted by the demands of family and housework, the bridging power of those ties is obstructed.

It thus appears that involvement with housework and child care may be associated with particular patterns of social contact, depending upon the "available time" (Presser 1984) for generating and maintaining social ties. The many responsibilities faced by a working parent may reduce the time available to engage in social association during non-working hours, resulting in networks of relatively smaller size and lower frequency of contact, but higher coworker composition. On the other hand, those who specialize in the domestic sphere may develop highly specialized networks which emphasize relatively greater proportions of friends, neighbors, and kin.

Gender Role Ideology

Parents' social contacts may also be influenced by beliefs about sex roles. That is, particular distributions of social contacts may be associated with attitudes about appropriate behaviors for men and women. For example, the ideology of separate spheres, a very traditional orientation toward sex roles, suggests that it is best for society
and its members if women specialize in the domestic sphere while men pursue activities in the economic sphere. If this ideology were played out perfectly in patterns of social association, social network ties would be very sex homogeneous. With the exception of dating/mating and perhaps certain kin relations, males would associate exclusively with other men, while females would associate only with other women. Of course, this is an exaggerated picture. However, since parenthood has traditionalizing influence on gender role attitudes (see Morgan and Waite 1987), as well as gender roles themselves (Cowan and Cowan 1988), it is possible that men and women may demonstrate increased sex homophily in their network relationships following the transition to parenthood.

An egalitarian gender role ideology, on the other hand, suggests that there are no inherent differences in the favored activities of men and women, and therefore no inherent preferences in the attributes of men's and women's network associates. If egalitarian roles were practiced faithfully, the responsibilities of the domestic and economic spheres would be shared equally. As a result, social interactions would be characterized by a very high level of sex heterogeneity, and men's and women's contact patterns overall would be quite similar.

While gender role ideology has become more egalitarian since the women's rights movement, a broad spectrum of belief still exists (see DiMaggio et al. 1996; Petersen and Donnisonwerth 1998). Unfortunately, the impact of gender role attitudes upon patterns of individuals' social network contacts remains largely unstudied. Only one study addresses this issue, and concludes that there is no clear link between gender role ideology and
network structure (Seccombe and Ishii-Kuntz 1994). However, the research tradition of Bott and others (Bott 1957; Wimberley 1973; Lee 1982: 215-17) suggests a clear association between segregated conjugal roles and integration into a same-sex peer group. This association will be investigated and further clarified in the present study.

Summary of Patterns Associated with Gender

In the previous section I have discussed a number of factors which are likely to influence parents' patterns of social contacts. Heavy involvement in the domestic sphere tends to be associated with a particular form of network structure, while greater orientation toward the economic/occupational sphere is associated with another. To the degree that sex and sphere-specialization are correlated, as it appears they commonly are, then these patterned associations will be gendered, and we can identify typically 'male' and 'female' forms of network structure. Personal beliefs about the preferred roles for men and women may also be predictive of parents' patterns of association.

Predicted Associations between Gender and Structural Features of Parents' Networks

Using ideas raised in the above discussion, the following predictions are made:

5. **Network Size and Contact Frequency:**

   A. Any reductions in network size and contact frequency associated with the transition to parenthood will be greater for women than for men.

   B. During the ensuing years of childrearing, parents who specialize in a sphere (e.g., stay-at-home moms) will have larger network sizes and greater contact frequency than those who hold significant responsibilities in several spheres (e.g., working mothers).
6. **Kin Composition:**
   
   A. Any increases in the proportion of kin in parents' networks will be greater for women than for men.
   
   B. Egalitarian attitudes about gender roles will be associated with enhanced kin composition among men.

7. **Friend Composition:**
   
   A. Any reductions in the proportion of friends in parents' networks will be greater for women than for men.
   
   B. During the ensuing years of childrearing, parents who specialize in a sphere (either domestic or economic) will have greater friend composition than those who hold significant responsibilities in several spheres.

8. **Coworker Composition:**
   
   A. Any decreases in the proportion of coworkers in parents' networks will be greater for women than for men.
   
   B. During the childrearing years, coworker composition will be inversely related to involvement in the domestic sphere.
   
   C. Traditional attitudes about gender roles will be associated with reduced coworker composition among women.

9. **Neighbor Composition:** During the childrearing years, neighbor composition will be positively associated with involvement in the domestic sphere.

10. **Sex Composition:**
A. The transition to parenthood will be associated with increases in the proportion of females in parents' networks.

B. During the childrearing years, female composition will be positively associated with involvement in the domestic sphere.

C. Traditional attitudes about gender roles will be associated with increased female composition among women, and decreased female composition among men.

**11 NETWORK DENSITY:**

A. Any increases in the density of parents' networks will be greater for women than for men.

B. During the childrearing years, density will be positively associated with involvement in the domestic sphere.

**Patterns Associated with Family Form**

I have already discussed some of the ways that parents' social networks are likely to be influenced by the timing of the transition to parenthood and by the gendered nature of the parenting experience itself. In addition to these factors, it is important to consider the potential influence of other household members on the social contact patterns of mothers and fathers.

**Relationship Status**

Among other actors in a household, spouses and partners are perhaps most important. All available evidence suggests that marriage and parenthood are significant network events (Steuve and Gersen 1977, Fischer and Oliker 1983; Moore 1990, Munch
et al. 1997), but we know little about the structural significance of parenthood outside of marriage (or similar long-term cohabiting relationships). Since single mothers and fathers experience a distinctive set of challenges and outcomes in parenting (see Radin 1988; Prater 1995; Bianchi 1999), we might well expect that the network structure of single parents would be distinctive as well.

With fewer ties to kin (neither direct ties to spouse/partner nor those to in-law relations), single parents' networks will likely be comprised of larger proportions of friends and other non-kin associates. In addition, single parents' networks may be more heterogeneous with respect to sex, since restrictions on cross-sex association imposed by marriage/cohabitation are not in effect. Compared to their counterparts in two-parent families, single parents may initially exhibit larger social networks, as they rely on a greater assortment of helpers in achieving the "continuity of coverage" (see LaRossa and LaRossa 1981) that infant care requires. However, there is also evidence to suggest that single parents receive less social support than their counterparts in more normative two-parent families, and that single mothers receive more social support than single fathers (e.g., Cohen 1995).

Children

In addition to other parents with whom childrearing duties can be shared, the structural significance of childrearing must also consider child-related factors. Even if the transition to first parenthood is an isolated experience, the childrearing phase of the life course continues over many years. In these ensuing years, the manner in which
parenthood affects opportunities for social contact depends upon the ages of children, as well as the total number of children in the household.

The age of the youngest child in a household shapes both the manner and intensity of childrearing responsibilities, and thereby opportunities for social contact. Infant care, for example, requires a rigorous sequence of feedings, diaper changes, naps, and supervised play times. The utter dependence of infants upon their adult caretakers, and the sheer volume of parental responsibilities, could restrict, to a noticeable degree, parents' contacts with network alters. Toddlers have more skills, more independence, and schedules that permit longer activities and outings. But they also have strong opinions about most things, and they lack inhibition, making it hard to prevent them from doing or saying something inappropriate. With a toddler, a parent may have more time available for fostering and maintaining social contacts, but the contacts themselves are likely to be demonstrably child-friendly—kin, neighbors, and friends with children, for example. From the pre-school stage and forward, children become increasingly independent and socialized, such that they may pose ever less of a restriction on parents' association. The friendships generated among school-age children may even stimulate network ties among their adult parents (Ishii-Kuntz and Masako 1989).

Previous research supports the idea that children's age is an important determinant of parents' social networks. Munch at al. (1997), for example, showed that network size and contact volume were significantly smaller among mothers of pre-schoolers than among mothers of older children. Similarly, fathers of young children demonstrated a
greater composition of kin and females in their networks, but a lesser composition of friends. The present study builds upon this research by addressing the relationship between child age and parents' networks with data on parents in the active childrearing phase.

In addition to the age of a parent's youngest child, the total number of children in the household is another important factor to consider. Clearly, the biggest changes in role responsibilities and relations occur with the initial transition to parenthood. However, the addition of subsequent children to a family increases the total amount of childrearing responsibilities, and may well be accompanied by some adjustments in the division of household and child care labor. With the onset of parenting, men may perform more housework than they had previously, as women are consumed with child care duties. Similarly, with the birth of a second child, fathers may become more involved with the care of the older child, while mothers focus on the newborn (see Stewart 1990; Goldberg and Michaels 1988: 345-7). Though Munch et al. (1997) found no significant effects of parity, it seems important to consider how parents' opportunities for social contact are shaped by their family size.

*Predicted Associations between Family Form and Structural Features of Parents' Networks*

Using ideas raised in the above discussion, the following predictions are made:

12. **Network Size and Contact Frequency:**

A. Prior to parenthood, singles will have greater network size and contact frequency
than parents who are married or cohabiting with a partner.

B. After the transition to parenthood, single parents will experience larger reductions in network size and contact frequency than their counterparts in two-parent families.

C. Size and contact frequency will be positively related to age of youngest child.

13. **Kin Composition:**

A. Compared to parents in two-parent families, the networks of singles will be comprised of a smaller proportion of kin both before and after parenthood.

B. Kin composition will be greater among parents with very young children than among those whose children are older.

C. Kin composition will be greater among parents with only one child than among those with two or more children.

14. **Friend Composition:**

A. Compared to parents in two-parent families, the networks of singles will be comprised of a larger proportion of friends both before and after parenthood.

B. Friend composition will be lower among parents with very young children than among those whose children are older.

C. Friend composition will be lower among parents with only one child than among those with two or more children.

**Ethnicity**

I have so far considered the probable impact of a number of exogenous variables on parenthood and social networks: transition timing, gendered features of the parenting
experience, and aspects of family form. Since persons of Hispanic ancestry comprise a significant minority of the population from which the sample studied here was drawn, it is also worthwhile to consider ethnic differences in the structural position of parents.

Unfortunately, previous research is only a somewhat helpful guide. For example, the most well-known study of Americans' discussion networks highlights no obvious differences in the networks of Hispanics and Whites (see Marsden 1987). On the other hand, three lesser-known studies converge on the finding that, compared to Anglos, Hispanics tend to be relatively kin-centered in their associations. Wagner (1988) finds that Mexican American single mothers tend to have smaller networks comprised of more kin and fewer friends than Anglo mothers in similar circumstances. MacPhee et al. (1996) similarly conclude that the social support networks of low-income Hispanic parents are comprised of more kin and fewer friends than the networks of comparable parents in other ethnic groups. And finally, Schweizer et al. concur that "the Hispanic community is kin based, whereas Anglo personal networks are comprised of a mixed circle of associates," including kin, friends, and neighbors (1998:9). Despite a similarity of findings in the latter three studies, it is important to point out that there were substantial differences in the conceptualization and measurement of social networks, as well as in study designs and quality. Only Marsden's (1987) study is based upon a large, representative sample of the general population--though the Schweizer et al. (1998) study is based upon a small (n=91) but representative sample generated through a random walk method.

Beyond differences in kin composition, previous network research has not
specifically addressed Hispanic ethnicity. Of course, to the extent that Hispanics' networks are comprised more of family members, they are definitionally comprised less of friends, coworkers, and other types of network associates. Kim and McHenry (1998), for example, use data from the National Survey of Families and Households to establish that among ethnic groups, Hispanics were the least likely to report frequent participation in job-related organizations. Though this study did not examine personal networks, the research implies that ties to coworkers may be less prevalent among Hispanics. But, this idea has never been empirically tested.

If we can accept the working hypothesis that Hispanics' networks tend to be comprised of more kin and fewer friends and coworkers than the networks of non-Hispanics, how will this ethnic difference in patterned social relationships impact, and be impacted by, the transition to parenthood? In previous discussion I have suggested that parenthood will stimulate an adjustment in parents' personal networks, shifting them away from relations with coworkers and friends and toward a denser circle of associates based around the domestic core--primarily kin and neighbors. Though limited, the existing data on Hispanics' personal networks suggests that a dense, kin-based circle of associates is the normative pattern, irrespective of parental status. If so, then the Hispanic variant of network adjustment following the transition to parenthood should be relatively tempered, relative to that among non-Hispanic parents.

Predicted Associations between Ethnicity and Structural Features of Parents' Networks

Using ideas raised in the above discussion, the following predictions are made:
15. **Kin Composition:**

A. Hispanics will have greater kin composition than non-Hispanics at all measurement points.

B. Any increases in kin composition following the transition to parenthood will be greater for non-Hispanics.

16. **Friend Composition:**

A. Hispanics will have lesser friend composition than non-Hispanics at all measurement points.

B. Any decrease in friend composition following the transition to parenthood will be greater for non-Hispanics.

17. **Coworker Composition:**

A. Hispanics will have lesser coworker composition than non-Hispanics at all measurement points.

B. Any decrease in coworker composition following the transition to parenthood will be greater for non-Hispanics.

**Outcomes of Network Transformation**

In previous sections I have discussed some of the ways that the structural transformations in personal networks associated with the transition to parenthood might be mediated by parents' social position. Though I predict a general trend toward a more kin-centered pattern of association, the specific kinds of shifts, as well as their magnitudes, will depend on a number of factors, including transition timing, gender roles, family form.
and ethnicity. But if the general hypothesis of this study (that parenthood is a significant network event) is supported, what are the implications? Why are shifting patterns of association important? In the following sections I sketch out two possible consequences of network transformation.

Postpartum Depression/Subjective Well-being

Can depressed mood in the postpartum period be predicted from patterned transformations in the interpersonal environment following parenthood? Emotions have social, as well as biological, origins (Thoits 1990). To the extent that self-definitions are formed and maintained through social interactions with others, any role transitions which inhibit social interactions and the patterns of relations through which they flow, could interfere with the maintenance of these self-definitions. Only through social contact can the experiences of childrearing be validated; otherwise childrearing's inevitable difficulties can be internalized, resulting in depression. If women conduct the greater share of childrearing, and therefore experience the greater share of network disruption following the transition to parenthood, could this disruption possibly have a link in the etiology of postpartum depression? To the extent that men experience network disruption with the transition to parenthood, might they also experience depression in the postpartum period?

There is some evidence that social relationships, especially those providing social support, may be critical in negotiating the adjustments made with childrearing's onset. For example, O'Hara et al. (1983) compared the structural characteristics of depressed (n=11) and non-depressed (n=19) women in the puerperium. Though network size did not differ
between the two groups, depressed subjects had less instrumental and emotional support. Support from spouses was found to be especially important. A second study conducted by Tietjen and Bradley (1985) assessed social networks and psychosocial adjustment in women (n=23) during pregnancy and following delivery. Like O'Hara et al., Tietjen and Bradley concluded that the quality of spousal support was crucial in adjustment. They also observed an increase in contact frequency among those women who experienced adjustment difficulties, suggesting a mobilization of support effect. Finally, in a prospective sample (n=129) of economically disadvantaged women, Collins et al. (1993) found that women with larger networks and higher quality social support had babies with higher birth weight and Apgar scores (a measure of newborn status). These women also experienced significantly less postpartum depression.

Though there is a larger literature on the role of social support in the etiology of postpartum depression, I have highlighted these studies for review because they are distinctive in their attention to the structural characteristics of new parents' networks. Most studies emphasize the perceived quality of support (as these studies also do) rather than structural features of the interpersonal environment (see Gottlieb and Pancer 1988 for review). Unfortunately, whatever the link between personal network properties and subjective states, it cannot be uncovered from previous literature. The studies are based on small, non-representative samples, omit men, and in any case, lead to inconsistent conclusions. The present study will rectify the first two of these issues, and provide clarity in the area of the third.
Network Transformation at Parenthood and the Heightening of Gender Differentiation

Researchers have noted that parenthood tends to make marriages more gender-specialized and traditional (e.g., Hoffman 1978; LaRossa and LaRossa 1981; Cowan and Cowan 1988). For those who see gender as an ongoing achievement rather than a dichotomy of stable attributes applied to individuals (e.g., West and Zimmerman 1987), the present study has the potential to further clarify this process and the conceptualization of gender itself. If gender is indeed something "evoked, created, and sustained day-by-day through interaction," (Thompson and Walker 1989: 865), then a study of men's and women's social contacts in the childrearing years may provide some insight into the process of gender differentiation.

For those most involved in it, childrearing may fundamentally structure the interpersonal environment, restricting access to some contacts, while facilitating others. For example, the networks of parents (usually women) who reduce labor force participation in order to specialize in childrearing will likely undergo compositional shifts, reflecting changing role responsibilities. To the extent that traditional conjugal roles are associated with distinct patterns of association, then the case for the interactional nature of gender is strengthened; the social networks themselves provide evidence of men's and women's patterned interactions. To the extent that the network consequences of particular roles apply across sex categories (for example, if domestic sphere specialization impacts male and female contacts similarly), then the case is even stronger, for biological difference loses its relevance in the understanding of gender, and we must look to social
structure instead.
CHAPTER 3: RESEARCH METHODS

This chapter explains the processes of research design and data gathering, the measurement of variables, and the statistical analyses that were used in this dissertation research. The chapter explains what kind of data were necessary to address the research questions, and how these data were obtained, from the process of survey development to those of coding and data entry. It describes the research setting, the statistical software package, and the many other gristly, mundane details that make up social science research.

Data Requirements

Prior to undertaking this study, it was necessary to critically examine existing data sets that might readily address the research questions outlined in the previous chapter. Though it would be unlikely that any existing data set could address all of the issues raised there, there were undoubtedly data available to address some of them. It is almost needless to say that it would be extremely fortunate if the objectives of this research could be carried out using an existing data set. The good fortune in such an event lies in the convenience of having data ready at the stroke of a few keys, as well as in the credibility that comes naturally to any study which is based upon good quality data.

Indeed several existing data sets contain network data, along with enough information on respondents’ childbearing/childrearing status to permit a meaningful examination of childrearing’s effect on parents’ social networks. Perhaps the most widely recognized of these is the General Social Survey (1972-1991), conducted by the National Opinion Research Center. The 1985 GSS included a social network module which asked
respondents about 5 network alters with whom they discussed important matters (see Marsden 1987). Because the GSS is based upon a large, nationally representative sample, it is has much to offer. However, the information it provides about the respondent’s childbearing/childrearing status is not specific enough to address the present research questions. For instance, the GSS inquires about the number of children within certain age ranges who are presently living in the respondent’s household. A single variable quantifies the number of children under age six. The GSS does not provide the specific ages of children living in a household, nor does it verify that the children are in fact the respondent’s. Lacking this information, any claims about the effect of young children on social networks would be extremely tenuous.

A second potential source of data is the Comparative Ecology of Human Development Project done at Cornell University (see Cochran et al. 1990). This project consisted of several studies framed around the topic of families and social networks. Though the majority of the studies were carried out in Europe, a component of the research surveyed 285 families in Syracuse, New York when a child in each family was three years old, and then again when that child was six. This study is particularly innovative, in that the family is examined as a system, with child-centered data prioritized. Though the sample is not large, it was gathered with the aim of fostering diversity in terms of race and socioeconomic status. And the network data in the Cornell study are particularly strong, as the study utilized multiple name generators (questions used to elicit the names of different kinds of network alters). But because the study compares the
networks of parents at ages three and six of their child, the data do not permit the exploration of the early and, I argue most intense, effects of childrearing on social networks.

Data restrictions make both the General Social Survey and the Syracuse component of the Comparative Ecology of Human Development Project unsuitable for addressing issues pertaining to the effect of young children on social networks. The GSS lacks any specific information about the respondent’s children, while the CEHDP sampled respondents so selectively that only three-year-olds’ parents were recruited for the study. A third source of data, the Ten Towns Study (see McPherson, Popielarz and Drobnic 1992), offers GSS-style network data along with the exact ages of respondents’ children. A probability sample of 1,050 Great Plains residents, the Ten Towns Study provided the data necessary to address my initial research questions in this area (see Munch, McPherson and Smith-Lovin 1997). However, the Ten Towns Study was sampled to reflect the Great Plains population, and not my particular interests. As a result, parents with young children comprise only about five percent of the total sample, making the data set less than adequate for the research proposed here. After thoughtful consideration of the alternatives, it became clear that my best effort to understand how childrearing impacts the social life of parents would involve gathering my own data.

The Ideal Data: A Prospective Longitudinal Study

In carrying out this study of childrearing and social networks, the ideal gave way to the practical in some respects. This is to say that in designing this study, I began by
considering what the ideal format for examining my research questions might be, and then made reasonable compromises where necessary, to make the study possible given my limited budget of time and money.

The ideal research design would be a prospective longitudinal study, which could be accomplished in two different ways. The first and most thorough kind of study would be based upon a nationally representative sample of childless persons of childbearing age (18-45).\(^2\) Obtaining such a sample would involve the use of a telephone screening and random digit dialing (see Sudman 1983). Over the telephone, several screening questions would be asked to ascertain the ages and childbearing/childrearing status of persons in a household. Many households would have no eligible respondents. In some households, there would be more than one eligible respondent, in which case the eligible respondent who would become a study participant would be determined randomly. Often, it would take more than one phone call to make contact with a prospective study participant, and to ask their permission to send information about the study. Even assuming that most eligible phone contacts would agree to participate in such a study, it would take many, many phone calls to identify a group of a few thousand childless 18-45 year-olds.

\(^2\) Males’ procreative age range is obviously wider than females’, but nevertheless the childbearing of both sexes occurs mostly within these ages. Using the same age range for both sexes helps to ensure comparability between the groups.

Fertility rates and similar demographic statistics define childbearing age as 15-45. However, a survey of this nature would require written consent of parent or guardian for minors under age 18. Given the logistical difficulties inherent in such a proposition, it would make sense to omit 15-17 year-olds, whose childrearing experiences are categorically different anyway.
After the initial telephone contact, the ideal study would survey respondents annually about their social networks, their current psychological status, their work and family status, and related attitudes. In order to maintain the highest possible response rate, considerable effort would be put towards tracking respondents who move, and to sending out reminder notices and replacement surveys to respondents who fail to complete and return the annual surveys (see Dillman 1983). Over the years, many of the respondents in this study would eventually have children, and many would not. Though children are obviously not “randomly assigned”, the respondents with children could reasonably be compared with childless respondents, as the two groups would consist of individuals selected from the same population.

The prospective longitudinal study described above offers two important advantages. The first is a true comparison between parents and non-parents, which is one way to ascertain the effect of parenthood and childrearing. The prospective longitudinal design is somewhat like an experiment, in which having and raising children is similar to the treatment condition, while remaining childless constitutes a kind of control, though again, the two conditions are not randomly assigned. This would be one important way of understanding how childrearing effects parents’ social networks. A second major benefit of the prospective longitudinal design is that it offers true over-time data, which is necessary to track the stabilities and changes of intrapersonal traits, such as depressive symptoms (see Featherman 1980). Such data would permit another important way of measuring the effect of children on parent’s networks.
The wealth of data that is generated through the use of a prospective longitudinal study is perhaps offset by its disadvantages, the most important of which is certainly its cost. Assuming that response rates remained high for many years (a large and potentially problematic assumption), it would cost tens of thousands of dollars (or more) to conduct this research. Since previous research shows that childrearing's effect is persistent through school age of the child (Munch et al. 1997), respondents would need to be tracked through several years. As those years clicked by, the survey could not be altered in any way to reflect new knowledge in the field or new variables of interest; the survey must remain ever an exact and faithful replication. Even so, data quality would likely decrease over time as a result of continued contact with the same sample (see Featherman 1980).

A further problem with the prospective longitudinal study described above is that the regular but infrequent contact with subjects would likely miss important developmental stages in the process by which parents' networks are modified in childrearing. For example, a subject might receive his first post-parenthood survey when his child is 2 weeks or 11 months old. Both scenarios are likely within the context of an annual survey, and both may miss the period of maximum social adjustment--when the novelty of parenthood has waned and yet daily life has not yet resumed a kind of normalcy. The prospective longitudinal study offers no way to fill in such gaps.

This dilemma could be overcome within the framework of a second kind of prospective longitudinal design by conducting similar research on an initial sample of
expectant parents. The initial telephone contact could be used to locate the sample and to ascertain each potential subject's due date or adoption date. With this knowledge, post-child surveys could be administered at researcher-defined intervals, to capture the periods of specific theoretical interest. Of course, the comparison group of non-parents would be lost in this research, but the enhancement in data quality might justify the trade-off. Put simply, a researcher would need to choose between the data deficiencies inherent in the first study or the sample selection bias in the second; either proposition would be expensive and imperfect. All things considered, the price of the elegant prospective longitudinal data may in fact be too high.

An Acceptable Alternative: The Retrospective Longitudinal Study

The retrospective longitudinal study constitutes an acceptable alternative. In the retrospective study, over-time data is elicited by asking respondents to recall information from months or years in the past. In the sense that they ask for information recalled from some time in the past, all surveys are retrospective. The difference is in the degree of past, whether it be the past instant or the past several decades. The retrospective longitudinal survey gathers information about one or more periods in a respondent's history, or about a sequence of events in a respondent's life course.

For the purposes of this research, a retrospective longitudinal survey would ask respondents to recall features of their social networks from the time immediately prior to the birth/adoption of their first child, and several specified times afterward (around the time of the child's first birth day, and the present time). Respondents would also be asked
to recall whether they experienced postpartum depression. Rather than surveying childless persons until and after they eventually become parents, this retrospective longitudinal study would survey parents and ask them to recall aspects of their life pre- and post-child.

Compared with the prospective longitudinal study, the retrospective longitudinal study offers similar data at a tremendous savings of time and money. A one-time, one-hour survey replaces a multi-year, multi-panel ordeal. It is more humane for both the researcher and her subjects, and it requires far fewer resources.

Another important advantage is that the cross-sectional approach to gathering retrospective data allows the researcher to elicit information about specific, researcher-defined time periods. The first prospective longitudinal study described above is likely to miss critical periods in network adjustment due to the chance-determined timing of the annual surveys, and the lengthy interval between those surveys. But the retrospective survey can ask the respondent to recall specific periods of interest, in this case, just before the child's birth and when the child was one year old.

One disadvantage of this cross-sectional retrospective survey of parents is sample selection bias. Like the second kind of prospective longitudinal study, the retrospective longitudinal study described here may not fully and accurately measure the effect of childrearing on social networks to the extent that parenthood itself is correlated with the independent (gender, age, race, and other demographic characteristics) and dependent variables (network characteristics, postpartum depression). However, it is important to point out that neither research design samples on the dependent variable (i.e., attempts to
explain some aspect of parenthood itself with a sample of parents). Rather, the objective of the research is to describe and explain the process of parental social adjustment. Given the these research objectives, a sample of parents is more focused and efficient, though the causal effects modeled on such a sample could still be biased. If necessary, a correction factor can be applied to reflect selectivity of the sample (Glass et al. 1985).

Perhaps the most well-known disadvantages of retrospective data are memory decay and recall bias. First, people may simply have difficulty remembering an event of the past, depending on how long ago the event occurred, how significant it was at the time, and what its continuing relevance is today (Cannell and Kahn 1968). Fortunately, the birth/adoption of one’s first child is among the most salient of all life events, and the most reliably retrieved (see Freedman et al. 1988). A survey which directs respondents to recall a particularly salient time in their lives, marked by an anchoring event of continuing significance, should trigger even a faulty memory. However, respondents’ ability to accurately reconstruct their social networks is still unproven (see Bernard, Killworth and Sailer 1979/80), and therefore still largely untried.

Recall bias describes the tendency for a subject’s memories of the past to be distorted, perhaps due to “the process of organizing one’s past and making it consistent or in an unconscious effort to maintain a positive self image” (Singleton et al. 1993: 304). To the extent that the depression is inconsistent with a positive self image, respondents may tend to minimize whatever postpartum symptoms they experienced, in which case results based upon retrospective measures would be conservative. It is harder to imagine
a scenario in which a respondent would overstate depression as a result of recall bias. It is more likely that a respondent would overstate ties to network associates, but a survey requiring detailed information about each network alter (as opposed to one which simply asks, "how many people did you consult when making important decisions?") would tend to discourage such overstatement and bias.

It is only prudent to be aware of issues which affect the validity of retrospective data, the most troubling of which are memory decay and recall bias. Hopefully, the data themselves will address these issues, by permitting a comparison among parents who experienced the birth of their first child in different years. Other factors held constant, if yearly variations in network characteristics and postpartum depression are observed, then a memory distortion process may well be in effect. To engage in a retrospective longitudinal study of networks is to take a calculated risk. But without the resources with which to conduct a prospective longitudinal study, it would seem to be a risk worth taking.

Research Design Summary

After careful consideration of the various alternatives, the choice of research designs was an obvious one. The questions of how the social networks of parents in different structural locations are modified in childrearing, and what the relationship between these factors and postpartum depression might be, would be best addressed (considering constraints of time and money) with a retrospective longitudinal study.

This research utilizes such a design. It samples parents who have a child (or
children) under the age of 10. In a written survey, it asks them to recall the time around birth/adoption of their first child. Since the first (oldest) child’s age varies from a few months to over 30 years, the research captures tremendous variation in childrearing experience. Some respondents will be asked to recall their social networks and emotional state from decades ago, while other respondents will be remembering just a few months back. But all will share the same points of reference: the time just before the birth of their first child, and the time around the first child’s first birthday. In addition, all respondents will be asked about their current social networks and their current emotional status.

Though this design does not permit a comparison between parents and non-parents, it does permit several other comparisons which are more pertinent to the research questions raised in the first chapter. First, the present-time network data permit the comparison of the social networks of parents with children of different ages. Previous research (Munch et al. 1997) shows that parents with pre-school age children tend to have distinctive patterns of social association. However that research was based on a sample of the general population, comprised of only about 5% parents with young children. This research will re-examine those findings in light of data from a highly specified sample of parents with young children.

Variation in the length of the recall period permits another kind of comparison. All respondents are asked to recall the same points of reference: the birth and first birthday of their oldest child. By comparing network and postpartum depression measures of respondents across recall periods, the reliability of the retrospective data can be evaluated.
albeit not in an exact manner.

**Sampling Frame**

The retrospective cross-sectional research design avoids one of the biggest pitfalls of research on the transition to parenthood: obtaining a representative sample of expectant parents. In fact, the vast majority of research in the transition-to-parenthood literature is based upon convenience samples of expectant or new parents, obtained through doctors' offices and childbirth preparation classes (for example, LaRossa and LaRossa 1981; Cowan and Cowan 1988; Fedele et al. 1988; McCannell 1988; Stewart, Jr. 1990). These researchers are not to be faulted for their efforts; quite simply, it is very difficult to (economically) obtain a representative sample of expectant parents. Challenges of this nature are one of the reasons why research in the field can rightly be criticized for being biased toward the white, middle-class.

With a retrospective study of the transition to parenthood, all phases of the research take place after the fact. Therefore, the retrospective approach to sampling really doesn't require much creativity. Any technique used to obtain a representative sample of the general population could be used to conduct this research, and then a screening mechanism could be used to eliminate persons with no children under the age of 10. A representative sample of the population would therefore yield a representative sample of parents.

A nationally-representative sample of parents would be highly desirable. As discussed previously, random digit dialing would be used to make initial telephone
contacts. Screening questions would determine eligibility for the study (by asking whether or not anyone in the household has a child or children under the age of ten).

Eligible persons would then be sent a written survey, to complete and return in a postage-paid envelope. Of course, a certain segment of the population does not have access to a household telephone, or even a house, so a survey based on random digit telephone contacts is not strictly representative, though it is one of the best that sampling methods available at the present time.

The biggest advantage of a nationally representative sample is that it is nationally representative, and results based upon it are therefore highly generalizable. Of all the factors that affect the quality of research, the sample is among the most important. It would thus be wise to obtain a national sample, if at all possible. A national sample is not without its drawbacks, however—the only one of which I can conceive is cost.

Financial restrictions dictated that this research be conducted with a locally representative sample of Pima County, which was obtained through the jury pool of the Pima County Superior Court system at the County Courthouse in Tucson. The sample is a high-quality locally representative sample; its only real drawback is that greater care must be taken when generalizing these results outside the geographic area.

Not all jury pools are representative of the local population; in fact, many are not. In many states, jury summonses are mailed only to the subset of the population who are registered voters, the people who have demonstrated that they take the duties and responsibilities of citizenship seriously. By contrast, the Pima County Superior Court
System seeks all adult residents of the county. Names of county residents are obtained through several mechanisms. The names of all persons who have obtained a driver's license or state identification card through the Department of Motor Vehicles, all registered voters in Pima County, and anyone locally collecting social assistance for which identification is required (including TANF, WIC, and General Assistance) are placed on a master list at Superior Court. Basically, any adult who is a citizen of the United States and a resident of Pima County (undocumented persons, non-residents, and certain "snowbirds" would not be included here since they are citizens of other places) and has some sort of an address or point of contact with the state, would be included in a master list, from which the daily jury pool is drawn by computer program.

It is a common misconception that there is some method or scheme by which individuals are selected from the master list by the computer program to appear at jury duty. In fact, the computer program selects names randomly, though it replaces the names of persons who have already served in the past calendar year (appearance counts as service, whether or not a person actually sits on a jury). Since names in the jury pool are selected at random, the jury pool constitutes a representative sample of local residents. Another common misconception is that certain occupations or physical disabilities are exempt from service. In fact, no occupations are exempt and most disabilities are accommodated through the use of sign language, braille, and other assistance programs. Thus, the system makes every effort to be inclusive.

Though the computer program generates a list of potential jurors at random, not
all persons who receive a jury pool summons will heed it immediately. In cases where it would cause undue hardship, jury duty can be postponed 6-8 weeks in the future. For example, college students often have their jury duty rescheduled to term breaks or summer. Some people postpone jury duty repeatedly, but they must appear eventually (within the year) because jury service cannot be legally avoided. Occasionally, people are prosecuted for failure to appear in response to a jury summons.

It is an unusual social event that draws a representative sample of the population and seats them in the same room together under duress. All things considered, the jury system does quite well. Certain persons are not represented, however. First, non-citizens and children under 18, though they may reside in the county, are not permitted to serve as jurors. Certain felons who have been denied their rights as citizens are not permitted to serve, though this rule is enforced only by an honor system, and many felons have their rights restored when they complete their sentences. There is no upper age limit on jury service, but older persons who have extensive functional disabilities or chronic medical problems can apply for a permanent exemption. Finally, anyone who has ever sat on a grand jury in the state of Arizona is considered to have fulfilled their lifetime service obligation, and is exempted from any additional service.

While a few types of people can absent themselves from jury duty, there is no reason to suspect that these absences would significantly affect the representativeness of a sample of parents with children under age ten. For example, the absence of the elderly infirm would have no impact on the representativeness of the sample, as the elderly infirm
are unlikely to be parents with children under ten. The absence of former grand jury
members should have no impact, as grand juries are exceedingly rare, and in any case, the
names of grand jury members are also randomly selected.

The exclusion of children, non-residents, and non-citizens may affect the
representativeness of the sample.\(^3\) That children under 18 are not included is somewhat
problematic, as a teenage parenthood is a phenomenon of continuing sociological interest.
However, most of that interest is directed toward understanding the causes of teenage
parenthood and/or its long term implications. This study would not make a contribution in
either of these areas, so the loss of teen parents is merely a loss of sample
representativeness. Further, the loss of representativeness is not as great as it might first
seem, since study participants who became parents prior to age 18 are included here, so
long as they were over the age of 18 at the time they appeared at jury duty. The principle
implication of the exclusion of teens is a lack of generalizability to the very youngest
parents.

The exclusion of non-residents and non-citizens is another matter to consider
seriously. Due to its year-round fair weather as well as its proximity to The University of
Arizona, Davis-Monthan Air Force Base, and the United States’ border with Mexico,
Pima County is home to a significant population of non-residents including “snowbirds”,

\(^3\) The exclusion of persons who have had their civil rights revoked may also affect
sample representativeness, and will be discussed later in the section on sample
composition.
students, military personnel and their families, and resident aliens. Arizona law requires that persons residing in the state for more than 60 days obtain a state driver's license and become residents. Persons who obey this law, as most do, would then have their names entered on the master list from which the jury pool is drawn. The state of Arizona is aggressive in applying the term 'resident', as residents pay a state personal income tax. Nevertheless, certain persons will resist attaining residential status, and in fact will avoid it actively. Non-citizens, though they may be residents, are unable to serve as jurors.

It is difficult to estimate what impact, if any, the exclusion of non-residents will have on the representativeness of sample. Presumably non-residents live elsewhere in an "official" capacity, and reside in the county on a part-year, temporary, or unofficial basis. For example, retirees and students from outside the state are generally official residents of some other place. Their absence from the jury pool does not make it a less representative sample of the local population, since they are not members of the local population, but of some other population. They are merely visiting the area on a temporary basis. On the other hand, a certain very small segment of the population (e.g., undocumented workers, homeless persons, etc.) may have no official place of residence. Such persons are always underrepresented in social science research, though how underrepresented they are is difficult to estimate.

In spite of these concerns, the jury pool constitutes, for the most part, an ideal research site. The jury pool system has access to the broadest, most representative sample of the county population. No other sampling technique, including random digit dialing,
could elicit such a high quality sample, because no other sampling technique has the force of the law behind it. Individuals cannot choose whether or not to respond to a jury summons, so the prospective jurors waiting together in a jury assembly room comprise, in effect, a captive audience for social research.

The representativeness of the sample has been discussed as the principle advantages of using the jury pool system as a sampling frame, but there are other advantages as well. The most significant of these is face-to-face contact between researcher and respondents. Telephone calls or knocks on the door often elicit respondent hostility, while surveys received in the mail too often elicit no attention at all. But people waiting in a jury assembly room truly are a captive audience. They are understimulated to the point of boredom, and typically glad for anything to help them pass the time. They are generally quite happy to participate in survey research when it is presented in this context: not as an intrusion in their free time, but something that helps to pass their captive time more quickly. Indeed, when this research was presented as an option, many non-eligible jurors sheepishly asked if they could participate anyway.

Face to face contact also promotes data quality. It is helpful to have a researcher on sight while respondents are completing a survey, so that any necessary clarification can be provided quickly and accurately. Of course, the fact that this research was conducted on site, in a face to face manner also greatly reduced the costs that would be associated with similar research conducted by telephone, or by utilizing the postal service.

Because it offers access to a representative sample of adult Pima County residents.
the jury pool of Pima County Superior Court is a setting ideally suited for conducting certain kinds of research. Basically, the Jury Commissioner takes all the responsibility for generating the sample, and makes the researcher’s job that much easier. The prospective jurors are generally happy to participate in research, as it does not interrupt their time at work or at home, but rather, gives them a diversion from a highly structured but understimulating environment. All that remains for the researcher is to administer the survey itself.

**Survey Instrument and Measures**

Having established a research design and sampling frame, it was next necessary to develop a questionnaire that permits testing of the predictions presented at the conclusion of the last chapter. Since no existing data set is capable of addressing all of these predictions, it was necessary to design a survey instrument with such capabilities. Such a questionnaire would summarize a respondent's marital and childrearing history, would reflect a respondent's concordance with traditional gender roles and ideology, would assess a respondent's current subjective well-being (and document a past instance of postpartum depression), would measure a respondent's social networks at the present time as well as retrospectively, would permit controls for geographic mobility, and would of course include basic demographic variables. This is a tall order for a written survey, and a thick one too. The resulting questionnaire is 18 pages long and is included here as an Appendix A.
Measures of Network Characteristics

The survey contains both retrospective and present-time measures of the two dependent variables in this research, network characteristics and subjective well-being. Questions used to elicit a list of network alters are called name generators. There are many different kinds of name generators, delineated by factors including content or role, spacial boundaries, time limits, etc. (Campbell and Lee 1990). The type of name generator used in a survey will produce respondent networks of varying size and heterogeneity. For example, name generators about intimate interpersonal ties will produce smaller, more homogenous networks, while the question “who do you know?” will produce large, heterogeneous ones. A meta-analysis shows that race and sex composition is similar across most studies, regardless of the name generator employed (Campbell and Lee 1990).

The name generator used in this research is, “Often people rely on the judgement of someone they know in making important decisions about their lives—for example, decisions about their family or their work. Is there anyone whose opinion you consider seriously in making important decisions?” This name generator is one of 8 employed in the Northern California Communities Study (see Fischer 1982). It is almost identical to the GSS name generator, with the exception of the fact that it employs no specific time limit (i.e., “over the past six months”). Because the GSS network name generator is well-known and widely replicated, it received serious consideration in the survey design process of this research. However, the name generator selected would have to be adaptable to three different recall periods (before the birth of the respondent’s oldest child.
around the oldest child's first birthday, and the present). Since a 6 month time frame applied retrospectively seemed inordinately confusing, and since self-reported time-bound transactions are biased toward the typical (see Hammer 1985; and more generally Freeman and Romney 1987; Freeman et al. 1987), the very similar NCCS name generator was used instead of the GSS. This was easily adapted to the two retrospective recall periods by adding phrases directing the respondent to think back to a particular period and answer the question with reference to that period (see pages 5 and 9 of the survey in Appendix A).

For each network alter listed, the respondent indicates the person's sex, race, and employment status, relationship to the respondent, frequency of contact with the respondent, geographic distance from the respondent, and the presence or absence of a relationship with other network alters. The survey provides spaces permitting the respondent to complete this information for up to 16 network alters. Though discussion networks tend to be small anyway, network studies have been criticized for placing artificial limits on the number of alters a respondent can name (Holland and Leinhardt 1973). Most network studies no longer limit the number of alters a respondent can name, but they do limit the collection of name interpreters (additional data describing each network alter, alter's relationship to respondent, and alter's relationship to other alters) to only a specified number of named alters. For example, the GSS and Ten Towns Study collected name interpreters for the first five network alters named, and the NCCS collected name interpreters for the first ten alters named for each of the eight name
generators. By permitting name interpreters for up to 16 different networks alters, this survey instrument is more flexible than most.

For each of the three recall periods, the name generator utilizes a chart format to detail network composition. Most network studies are based on telephone or face to face interviews rather than self-administered questionnaires. Interviews are often dozens of pages (or computer screens) long, a format that would be impractical in a self-administered survey. For instance, a respondent would have to remember who "person #1" is, while he flipped through a series of pages answering questions about that alter. The chart format requires no flipping, and remains a constant visual reference to a respondent as he or she completes the questionnaire.

Network density, a measure of network structure defined as the proportion of actual to possible ties between alters, is usually ascertained by asking a series of repetitive questions in an algorithmic manner. For example, a telephone interviewer will usually ask, "Does the 1st person [fill in the name] know the 2nd person [fill in the name]? Does the 1st person [fill in the name] know the 3rd person [fill in the name]? Does the 1st person [fill in the name] know the 4th person [fill in the name]?, etc. This type of questioning would not be feasible on a self-administered written questionnaire. Accordingly, a one-page chart was devised to measure the presence or absence of ties between alters. The chart appears on pages 7, 10, and 13 of the survey in Appendix A.

* The design for this chart was originally conceived by Lynn Smith-Lovin, chair of this dissertation research committee.
The reliability of network data has been called into question on many occasions. A central issue is the discrepancy between actually existing ties and perceived social ties. After a series of studies investigating this discrepancy (see Killworth and Bernard 1976; Bernard and Killworth 1977; Killworth and Bernard 1979/80; and Bernard et al. 1979/80), Killworth and Bernard (1979/80: 21) conclude, “people do not know, with any accuracy, those to whom they talk”. Given the discrepancy that occurs between perception and behavior in studies of even the recent past, there is legitimate cause for concern about the accuracy of retrospective network data, especially when the recall period may be up to several decades in length. The findings of the BKS research have been alarming to many network researchers, and retrospective network studies are so rare that I am unaware of any others.

In fact, accuracy (in terms of the degree of concordance between perception and behavior) is not always of paramount importance. Marsden (1990) argues that accuracy is necessary in satisfying some kinds of research objectives, but not others. If the objective of the research is to seek a precise description of a network, then accuracy is paramount. If, on the other hand, network measures are used as indicators reflecting differences between actors or other social units, then accuracy is less significant.

Validity and reliability are more significant issues in network measurement. Burt examined the “discussing personal matters” name generator thoroughly, and found it to be a valid measure of intimacy in relationships, “a central quality and a stable point of reference for understanding other qualities of relationship” (1985: 318). Reliability of
network measures is more difficult to ascertain, as social networks are not static; people may easily change who they discuss important matters with or which matters they consider important. Fortunately, the research design employed in this study should permit an informal assessment of the reliability of the retrospective network measures. Since the same recall reference point is used for all respondents ("during the period just prior to the birth of your oldest child"), length-of-recall-period-variations in network characteristics may signify unreliability in retrospective network measures.

**Measures of Subjective Well-being**

The survey contains both present-time and retrospective measures of subjective well-being, designed to measure postpartum depression. The present-time measure is the Edinburgh Postnatal Depression Scale (Cox et al. 1987), which was specifically developed to quickly assess depression in the postpartum period. More general measures of depression (e.g., Beck 1961; Zung 1965) can be inappropriate for the postnatal period, as they tend to place heavy emphasis on somatic symptoms which may be normal in the puerperium. The validity of the EPDS has been established; its sensitivity is 86% (proportion of true positives to all positives) and its specificity is 78% (proportion of true negatives to all negatives). Advantages of the EDPS include the fact that it is short (just 10 items), easy to complete, and easy to score.

The EDPS appears on pages 15 and 16 of the survey in Appendix A. Items 16, 18, 19, 20, 21, and 22 are reverse coded, with response categories coded 0, 1, 2, and 3 according to the severity of the symptom. A validation study showed that mothers scoring
above a 12 were likely to be suffering from a depressive illness, while a threshold of 9 reduces the failed detection rate to less than 10 percent (Cox et al. 1987).

Shortly after the development of the EDPS, Stein and Van den Akker (1992) created the Bromley Postnatal Depression Scale (BDPS) as a way to measure postpartum depression retrospectively. Seeking to learn more about patients' histories of postpartum depression, Stein and Van den Akker discovered that while most patients could not reliably remember the presence or absence of specific symptoms in the postpartum period, they could recall more general patterns of low mood and poor functioning. Women who read a clinical description of postpartum depression were able to report whether or not they had experienced postpartum depression retrospectively. The assessment has a sensitivity of 62%, and a specificity of 94%. The Bromley screening for retrospective assessment of postpartum depression appears on page 14 of the survey in Appendix A.

Measures of Gender

This research attempts to disentangle some of the many factors that might modify the experience of parenting and its effects on network position and subjective well-being. Central among these factors is the idea of gender, or patterns of roles and relationships that are correlated with biological sex. Only females can gestate and lactate, but either men or women can care for children in other ways, and either men or women could be considered the breadwinner or caretaker (or housecleaner or grassmower) in a family. In order to capture some of these rather complicated sets of behaviors and the beliefs on which they are based, this survey includes a few simple measures of both gender roles and
Some of these measures are taken from the Quality of Employment Survey (see Quinn and Staines 1979) and are included in the lower portion of page 2 of the survey in Appendix A. They ask the respondent to indicate the hours per day they spend "on home chores" and "taking care of or doing things with children".

It is important to note that while some of the home chores given as examples might be gendered, the list as a whole is not. So while the list of tasks includes cooking, cleaning and shopping, it also includes repairs, yardwork, and keeping track of money and bills. It is not so much a measure of time the respondent spends doing what has traditionally been considered women's work as it is a measure of involvement with the sphere of the home. Likewise the question about children is phrased in such a way as to include not only "taking care of" but also "doing things with" children. Since men and women spend time with their children differently, with men less likely to see themselves in the caretaking role (see Parke and Stearns 1993), this question captures more global involvement with children.

Another distinctive feature of these items is that their format permits the respondent to estimate the hours they spend performing these tasks on days in which they either do or don't work outside the home. Traditionally, men have worked outside the home and women have not; these measures are constructed to make no assumptions about who does what, instead gathering data for a variety of scenarios.

The survey also includes four measures of relational power, which are adopted
from the research of Huber and Spitze (1983). These items appear at the top page 18 of the survey in Appendix A, and are intended to be answered only by those respondents who are currently married or living with a partner. The respondent is asked to indicate who makes various kinds of decisions in the household. In traditional, role-differentiated relationships men would tend to make major economic decisions about such things as whether to move or make a large purchase, whereas women would be in charge of the domestic sphere, and so might decide which house or apartment to live in. To the extent that decision-making is shared, relationships may tend toward egalitarianism, which is indicative less-traditional gender roles and ideology.

Finally, in addition to these items which measure the respondent's spheres of influence in decision-making and behavioral involvement in the spheres of home and children, the survey also permits the expression of a respondent's attitudes regarding these matters. Four items indicative of gender role ideology are taken from the General Social Survey (Davis and Smith 1992) and appear at the top of page 3 of the survey.

Additional Survey Features and Measures

The first page of the questionnaire consists of a brief introductory letter and a few short screening questions to verify a potential respondent's eligibility for inclusion in this sample and study. The letter is printed on University of Arizona letterhead and is signed by persons directing the research in order to lend as much credibility to the research as possible. The question, "Do you currently have a child or children under the age of ten?" is the important screening item, and is located on the front page so that it will be possible
for both the respondent and researcher to immediately determine whether a potential respondent meets the criteria for the study. Because of their importance in the research, the front page is also where a respondent's age, race/ethnicity, and gender are indicated.

The questionnaire's second page introduces the respondent to the first of many charts used in the survey. This chart summarizes a respondent's entire childrearing history, including birth dates, current custodial status, current day care use, and whether each child is a step-child. If these questions were asked individually, information for just one child would require an entire page. But in the chart format, all the information is summarized by the respondent in just half a page, for up to six children. This childrearing history is significant and unique in that no other social network surveys include such complete data in this area. As discussed above in the section on data requirements, most social network data sets were not gathered for the purpose of examining parenthood's impact on networks and so they include only limited information on a respondent's children.

The bottom portion of the survey's third page is devoted to items which measure other factors that might contribute to network disruption including job changes and geographic mobility. The survey asks the respondent to indicate how long (in years and months) he or she has lived in Pima County, has lived at his or her current address, and has worked at the same firm or organization. Since both the quantity and the quality of geographic moves might impact social networks, respondents are also asked to indicate all moves since the birth of their first child.

The bottom portion of page 16 of the survey asks the respondent to indicate his or
her religion, employment status, and highest degree attained. On the following page the respondent uses the by-now-familiar chart format to summarize up to five relationships in which he or she was married or living with a partner. The respondent indicates the month and year in which each relationship began and ended. Additionally, the respondent indicates in each case whether they lived together first and then married, married without living together first, or never married. Finally, the respondent indicates whether they had any children together.

Respondents who are currently married or in a committed relationship are asked to provide some basic demographic information about their spouse or partner on the bottom of page 17. This information parallels the information already gathered about the respondent and includes the spouse's/partner's: gender, race/ethnicity, religion, employment status, age, and highest degree attained. Finally, the bottom of the last page of the survey (page 18) asks the respondent to indicate his or her approximate individual and family income. This item was deliberately placed last on the survey as it is known to elicit non-cooperation, and sometimes outright hostility. By placing the income item last, such reactions should not impact the data already obtained.

Survey Development

An initial draft of the survey was shown to dissertation committee members. A secondary draft was pre-tested on sociology department members and their affiliates who would have been eligible to participate in the research based on the screening questions. Once the final draft was established, it was screened and exempted by the Human Subjects
Review Board (Assurance Identification Number M-1233), and the process of gathering data commenced.

Administration

The data-gathering phase of this research took place during three months in the summer of 1995.\(^5\) Prospective jurors were generally assembled 4-5 days per week, at times ranging from 7:30 a.m. to noon, depending upon court schedules. The number of prospective jurors summoned ranged from 60 to 600 on days when trials were scheduled, but was usually around 250. Once the first wave of official announcements was made, the Jury Commissioner allowed me to access the public address system to explain my study. Although I did not read from a script, I did attempt to explain who I was and what I was doing in the same way each day. This explanation/solicitation took a form similar to the following:

"Good Morning. My name is Allison Munch and I am a graduate student in the sociology department at the University of Arizona. I am joining you here this morning because we are currently doing a study of some of the ways that being a parent affects people's lives. This research is being done with the jury pool because, as you well know, it is very difficult to get out of jury duty, and that makes the group assembled here very representative of our local population.

I have a written survey here [hold up survey], which I would like to give to anyone who has a child under the age of ten. The survey is anonymous, and will not be used for

\(^5\) There was a 3 week break in the research at about the mid-point of this time period, when the presiding judge halted all surveys pending further notification, and then became ill. The judge wanted to personally examine any surveys to which jurors were being exposed, in order to verify that they were not offensive or likely to create juror bias. His concern was spurred on by a few surveys which contained "political" items, such as material about illicit drugs or handguns. This research would obviously not fall into that category, but suffered from the break anyway.
any purpose other than social research. Anyone with a child under ten is eligible to participate in this research, and I want to emphasize that it does not matter whether the child currently lives with you or not, or whether the child is biological, adopted, or a stepchild. We recognize that there are lots of ways that children come into people's lives nowadays, and we want to have participation from parents of all sorts. Basically, if you have a child under the age of ten, we could really use your help.

Now you may be thinking to yourself, 'Gee, filling out a survey does not sound all that fun...' Well let me assure you that things don't get any more exciting around here than they are right now. You will have plenty of time on your hands later to sit around and contemplate your boredom, so why not make the most of these next few minutes by helping me with my research? Under these circumstances, you may be glad to have something to do.

If you think you can help, or if you just have some questions about the research, please come forward some time in the next 45 minutes or so, and I would be very happy to talk to you. Once again, my name is Allison, and I do appreciate your help. Thank you."

This announcement was followed up approximately every twenty minutes or so with a similar but condensed announcement, "for those of you who came in late." Although there were usually a few latecomers to jury duty, the purpose of the repeated announcement was also to prod into action those potential respondents who were still undecided about whether they wanted to complete a survey. By re-emphasizing my need for their help, and humorously referring the collective ennui, I hoped to establish a rapport that would encourage participation. I believe this technique was effective, as successive announcements often yielded additional respondents.

Because of its length and complexity, it was essential to do a "walk-through" before sending a respondent off to work on the survey independently. That is, knowing that some people will not read and/or comprehend long sets of directions, I verbally explained what they would be doing in each section of the survey. Most of these
explanations were one-on-one, although I occasionally talked with respondents in groups of two or three at a time. I used visual cues to determine whether a subject was understanding the information presented. If I sensed there was some confusion, I assumed responsibility for it with phrases like, "Let's see, I probably didn't explain that part very well. Another way you could think about this is...." I encouraged them to come back to me if something didn't make sense to them when they actually sat down with the survey. This "walk-through" was probably the most important part of the data-gathering process; without it, I believe that most respondents would have been intimidated, annoyed, or confused by the survey in a manner that could severely affect data quality.

When not making promotional announcements for the survey or administering the survey to eligible respondents, I occupied myself chatting with prospective jurors, especially those seated in the first few rows of the jury assembly room. During this time I fielded many questions about the research, and about my own personal life and progress as a graduate student. Prospective jurors were often curious to know whether I myself was a parent, and on a half-dozen occasions I was asked why we weren't researching the increasingly important role of custodial grandparents. (In response to this query I could only verify the importance of the topic and assure them that despite the fact that it wasn't the focus of this particular study, other researchers were definitely interested in it.)

As completed surveys were returned to me, I often did a slight "debriefing" to get respondent's reactions. Some respondents had nothing to say as they returned their survey in silence, but most seemed anxious to comment about the experience of completing the
survey in some way, such as "That was really interesting." or "That took me a little longer that twenty minutes." Some wanted to verify that they had completed a particular section of the survey correctly, and a few seem really interested in talking about the substantive issues raised in the survey, such as depression, or their propensity for geographic moves. I recall only one hostile reaction, from a respondent who had a philosophical objection to collecting data on race/ethnicity. As she saw it, we were all part of one race (human), and I assured her that I agreed with her.

For the most part I stayed in the jury assembly for about two hours each morning, long enough to personally collect each of the surveys I had distributed. However, I was also careful to inform respondents during the "walk-through" of the small chance that they could be called away to a courtroom before they had a chance to complete the survey in its entirety. I explained that they would be coming back to this same room later on, so they could return the survey later on in the day. If I was not around, I instructed them to leave the completed survey with someone on the Jury Commissioner's staff, who would give it to me the next day. Though a few surveys were retrieved in this manner, I feel certain that the majority were lost due to respondents' actual service on juries. The fact that potential jurors, by definition, could be called away for jury service at any time was one of the few disadvantages of research in this setting.

An Honors undergraduate research assistant was trained to work as a functional substitute for me on those mornings when I could not meet with the jury pool, or when I could not stay long enough to personally collect all completed surveys. Most of the data
were gathered by me personally, but sometimes we worked together, and occasionally the research assistant worked independently. No differences were observed in the quality or quantity of data gathered under these slightly differing circumstances. It is to a description of these data that I now turn.

Coding and Data Entry

Before entering any data, I developed a codebook to serve as a guide during the coding and data entry phase of this research. The codebook assigns a unique variable names to each survey item and values to each possible response. Whenever possible, variable names are descriptive. For example, the variable NUMKID is the total number of children listed by the respondent. The numerical values assigned to non-numeric responses (such as those for race or religion) follow GSS conventions. With the codebook and completed surveys side-by-side, I entered the data directly into SAS. All of the variables are numeric, with the exception of OCC (respondent's occupation) and SPOCC (respondent's spouse's occupation).

The resulting data set has 368 cases and 589 variables. Almost three-fourths of these data consist of network variables, with 147 network variables for each of the three time periods. This sample and data set are described in greater detail below.

Sample Features

Size

All else equal, larger samples are better than smaller ones, and at first glance a sample of 368 may not seem particularly large. However, sample size must be evaluated
with reference to the population from which it is drawn. In this case, the population of interest is all adult Pima County residents who are parents with a child under the age of 10.

Though this population of parents is virtually impossible to precisely identify or quantify, it may be illustrative to refer to a targeted age group from the 1990 U.S. Census of Pima County. Pima County's total population in 1990 was 666,880. However, a sizable portion of the Pima County population consists of persons under the age of 18, or over the age of 54. Subtracting these persons, who are not included in our theoretical population of adult parents with children under age ten, we have 354,217 residents of Pima County between the ages of 18 and 54. Not all of these residents fit the parameters of this study exactly; some have children who are too old for them to be eligible for this study, and approximately 15% are childless. Nevertheless, even using this liberal indicator of the population size, 368 represents greater than a .001 sample of the population.

Moreover, this sample size is adequate for a regional study. Sudman (1990) recommends a sample size of 200-500 as a general guideline for a regional study. More important than total sample size, however, is the number of units included in each of the breakdowns used in any analyses. Major breakdowns (such as sex) should have at least 100 units, while minor breakdowns (such as racial or income groups) require 20-50. In

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6 For demographic purposes, childbearing age is defined as 15-44, even though men are technically fertile for much longer and female outliers on both sides of this parameter are not terribly uncommon.
these respects, the size of the sample is certainly large enough to be useful.

Composition

While evaluating the sample's size is a relatively straightforward task, determining its representativeness poses a much greater challenge. Unfortunately, no existing body of data permits a comparison of the sample to the larger population of interest. In fact, based on the sampling frame used, this study likely represents the best measurement of the population ever obtained.

For illustrative purposes only, we can return to the general population of 18-54 year-olds in Pima County from the 1990 Census. In many ways, we would expect the sample of parents to resemble this targeted age group from the Census, but we can expect some important differences as well.

For example, while the sex composition of the general population of 18-54 year-olds is fairly equally distributed among males and females, we would expect a sample of parents to be disproportionately female. There are several reasons for this expectation. For instance, some men are fathers without their knowledge; while it is possible for males to be unaware of their parental status, females always seem to find out eventually. Denial of parenthood seems more common than actual ignorance, however, and males seem more prone to this as well. Some parental unions are so fleeting that a father never has an opportunity to take an active parental role in his child's life, whether by choice or circumstance. When longer-term parental unions dissolve, mothers usually retain custody
of the children. Divorce and separation agreements sometimes restrict paternal visits or roles, and can result in geographic moves which make paternal participation difficult. Even when there is no great geographic separation, strained relationships between parents may not be conducive to fatherhood (O'Connell 1993). Maternal custody is no longer a given, but it is still by far the more common arrangement. Due to the predominance of maternal custody, when children become estranged from a parent, it is usually from father rather than a mother.

Men who have extremely limited contact with their children might not consider themselves to be parents. It is difficult to determine whether such men should be included in the theoretical population of parents, but in any case, they probably wouldn't feel eligible to participate in a survey about "some of the ways that parenthood affects people's lives". Thus we would expect a sample of parents to be disproportionately female.

While the greatest share of the gender disparity in parental status is probably due to the factors mentioned above, we might also expect some disparity due to a peculiarity of the sampling frame. As discussed previously, the jury pool sample is a random sample of the local population with a few small exceptions. One of those exceptions is stipulated by Arizona law; those in prison, on probation, or on parole are disenfranchised and not eligible to serve on a jury. State law also holds that persons with a second felony conviction are disenfranchised for life. As a result, over 2% of the State's population is permanently exempted from jury service, and the number is steadily increasing (Human Rights Watch 1998). Since most of the disenfranchised are male, we would expect the
gender composition of the sample to reflect this.

In addition to sex composition, we can also expect some differences in ethnic composition between a sample of parents with young children and the general population of 18-54 year-olds in Pima County. Persons of Hispanic origin constitute a significant minority in Pima County, but we would expect them to be somewhat underrepresented in the study sample. The chief factor accounting for this discrepancy in ethnic composition is the language barrier. In the 1990 census, around 80 percent of Hispanics reported speaking a language other than English at home (del Pinal and Singer 1997). Unfortunately, cost considerations precluded the hiring of a Spanish speaker to administer the questionnaire to potential respondents who preferred that language. Many Pima County residents of Hispanic origin are perfectly capable of completing an 18-page written survey in English. Undoubtedly, however, there were some for whom feelings of inadequacy about their English language skills served as a barrier to participation in this research.

For illustrative purposes only, we can now compare the study sample to the general population of 18-54 year-olds in Pima County. The true study population is unknown, and we fully expect differences between a sample of parents and the general population, but Table 3-1 provides information on the basic properties of the data and is useful for that reason. As anticipated, the sample of parents is disproportionately female, as only one third of survey respondents were male. Some of this discrepancy is due to gender differences in awareness of and involvement with one's parental status, and is not a
flaw of this study. A portion of the discrepancy may also be due to the sampling frame, which excludes persons with certain kinds of involvement in the criminal justice system.

As shown in Table 3-1, Hispanics constitute nearly 24 percent of the general population of 18-24 year olds, but only 17 percent of the study sample. Considering the probable language barrier faced by many Hispanic respondents, the smallness of this discrepancy is encouraging. The jury pool sampling frame allowed access to a population normally elusive to survey researchers, who are often forced to rely on oversampling. Many otherwise high-quality data sets can be fairly criticized for failing to incorporate minority groups. Considering that no special efforts were made to incorporate persons of Hispanic origin into this research, the proportion of Hispanics in the data is remarkable and certainly sizable enough to serve as a useful comparison to their non-Hispanic counterparts.

The nearly random sampling frame utilized in this research provided access to one of the best samples of parents with young children ever obtained. Since the population of parents with young children is unknown, it is difficult to assess the sample's representativeness. It is not strictly valid to compare the study sample to the general population of adults in the same age category, but such a comparison is useful in some ways. Compared to the general population, we would fully expect a sample of parents to be lopsidedly female. This is not necessarily indicative of a sampling problem. The underrepresentation of Hispanics in the sample is probably due to a language barrier. While somewhat problematic, this underrepresentation was not unanticipated. Nor is it
extreme. The 17 percent Hispanic component of the sample is sizeable and useful.

**Missing Data**

Despite the above-described efforts to appropriately design and administer the survey to the best possible sample of the chosen population, it is important that the actual quality of the obtained data be carefully evaluated. The questionnaire used in this research is eighteen pages long and densely-worded at that. It would be unrealistic to expect that all 368 survey respondents would produce completed surveys that were error-free in every detail. But barring perfection, it would be desirable if errors and omissions were minimal and clearly unsystematic.

Unfortunately, there are some discernable patterns in item nonresponse. For example, 4 respondents (nearly 1 percent of the sample) failed to complete Page 2 of the questionnaire in its entirety. There was nothing particularly difficult about this portion of the survey, and in fact, it was deliberately formulated to be fairly straightforward in order to get respondents "warmed up" to the survey and engaged in/committed to the process before they were confronted with the more taxing and challenging portions of the survey. The most likely explanation for these omissions is that respondents simply didn't realize, initially, that the questionnaire was of a double-sided format. Unfortunately, the affected page contained measures of the ages of respondent's children, as well as measures of involvement in home chores and child care. Since all of these items are central to the forthcoming analysis, the loss of this data effectively represents the loss of 4 cases.

If Page 2 of the questionnaire was among the easiest to complete, then network
density diagrams (located on Pages 8, 11, and 14 of the survey instrument) were surely among the most difficult. In fact, a number of respondents failed to correctly complete density diagrams when it appeared that they should have. Some respondents simply skipped the diagrams entirely, but a significant proportion of respondents provided data which was unusable. Both problems, I believe, are related to the laborious nature of this particular portion of the survey. In order to correctly complete the density diagram, the respondent was asked to copy a list of names from the name generator chart to the density diagram, and then to perform the careful thought exercise of "who knows whom?, linking the names of each pair of alters who know each other. This takes considerable time and effort. Respondents may have felt overwhelmed by the task, or possibly confused by it. Those who were confused may have thought it better to skip the item entirely than to risk completing it incorrectly.

Some respondents completed the density diagrams, but in a manner which makes the data unusable, due to the probable invalidity of the responses. These responses of doubtful validity usually took a characteristic pattern: Lines were drawn around the perimeter of the diagram, linking only adjacent names. In networks of size 3 such a pattern is common and perhaps even typical, but as size increases, the probability of this

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7 It is important to note that we would not expect every respondent to complete all three diagrams. In fact, respondents with a very young child (e.g., newborns) were instructed to complete only the first of the three diagrams, because the reference points of the latter diagrams (the child's first birthday, and the present time) are difficult to apply. Similarly, a respondent with a child aged 13 months might complete the first and second section, but skip the third.
pattern is increasingly uncommon. Instead, we would expect to see more geometrically irregular patterns, such as clusters of associates who all know each other (as in the case with family members) or particular alters of great centrality (such as spouses) who seem to know everyone else. In the process of coding, the distinctive appearance of these hollow-centered diagrams was easy to discern. Occasionally, a respondent would write a message to the side of the diagram which would confirm that "they all know each other." When such a message was provided, I coded the response accordingly. Lacking such a directive, the case was dropped for those analyses which included network density measures. Fortunately, network density is used exclusively as a dependent variable in the forthcoming analyses, so this data quality problem does not impact any of the other analyses. Five cases are missing the density measure from just before the birth of the oldest child, and just a few are missing from each of the subsequent observation points.

Finally, the survey items pertaining to individual and household income were skipped with regularity. 86 out of 368 respondents did not respond to the personal income item, and a few even wrote comments such as "none of your business" and "irrelevant" on the survey. Hostility to this survey item was certainly not unexpected, and the item was deliberately placed at the end of the questionnaire in order to avoid any future non-cooperation as a result of that hostility. Fortunately, the income measure was not central to this research agenda, and so the affected cases could be retained for all of the analyses reported here.

In addition to these discernable patterns within the set of missing data, there were
other non-systematic omissions and errors as well, but these are not of particular concern here. Overall, the quality of the data appears to be quite high, though the problems with the density measure require more careful scrutiny.

Summary

This chapter presents an overview of my research process. Desiring to examine the issues and ideas set forth in Chapter 2, I began by considering what sorts of data would best serve to test the predictions outlined there. I gave serious consideration to several existing data sets, but eventually concluded that a customized data set would be necessary. These customized data offer: specific information about children's ages and parents' childrearing responsibilities, over-time network data on a focused sample of parents, and a sample with a significant Hispanic component.

Having determined to gather new data, I considered the merits and drawbacks of a number of research designs. Data of the highest possible quality could be obtained through a prospective longitudinal study, but only at very great expense. I chose a retrospective approach, which uses a cross-sectional design to yield over-time data.

A unique sampling frame is utilized in this research, and it receives considerable discussion here. By conducting research with the Pima County Superior Court jury pool, I had access to a local, random sample of adult Pima County residents. While participation in the survey was voluntary, the sample of parents obtained there is almost certainly more representative than that obtained by more traditional approaches, which rely on convenience samples of parents located in such places as doctors' offices and
childbirth preparation classes.

The survey I designed addresses all of the research questions posed in the first chapter. It borrows from many reliable and familiar existing research instruments, but assembles them in a new way to yield information in a convenient, user-friendly format. I administered the survey and talked to most of the respondents. I coded and entered all of the data personally and the result is a data set of very high quality.

I conclude the chapter with a description of some features of the data set and the sample obtained in this research. It is virtually impossible to know whether the sample is truly representative of the adult population of parents with children under the age of 10 in Pima County, but using 1990 Census data, I examine the sample's characteristics critically, and conclude that the sample is not only useful, but unique and exemplary in some important ways. With data in hand, I turn to a more focussed examination of my research questions.
CHAPTER 4: THE TRANSITION TO PARENTHOOD AND SOCIAL NETWORKS

In this chapter I use retrospective data to examine the transition to parenthood, a life course stage that is for the purposes of this study encapsulated in the period beginning just prior to the birth of the oldest child and ending with that child's first birthday. Previous research has demonstrated that women generally have larger social networks and greater contact volume than men. During the childrearing years, however, women's networks are constricted (Campbell 1988; Munch, McPherson and Smith-Lovin 1997). If gender differences are the product of social relationships, as Smith-Lovin and McPherson (1993) have argued, then these gendered network effects during the childrearing years may be of great significance in the process by which men and women come to inhabit somewhat separate social worlds. Until now, data limitations have prevented a thorough examination of these processes.

The data gathered for this study offer the most detailed picture of social networks during the childrearing years to date. In this chapter, I begin an examination of the retrospective component of these data, in which respondents recall the features of their networks just before the birth of their oldest child and one year later. The chapter consists of an examination of several network properties: network size, contact volume, and a variety of compositional measures including proportion kin, proportion female, proportion friend, proportion coworker, and network density. For each of the network properties, I begin with a simple description of means, pre- and post-parenthood. I use OLS regression
to examine the correlates of each network property, as well as the correlates of changes in network properties when there are substantial pre- and post-parenthood differences.

Before beginning these analyses however, it is important to consider some methodological issues particular to the retrospective data.

**Network Size and Memory Decay**

This study uses the same network name generator ("...is/was there anyone whose opinion you would consider seriously in making important decisions?") with reference to three different periods in a respondent's life—just prior to the birth of his/her oldest child, around the time of that child's first birthday, and the present. The only eligibility requirement of the study was that respondents must have a child (or children) under the age of ten. The child who fulfills a respondent's eligibility requirement may very well not be his/her oldest child, however. In fact, approximately one-third of the sample was challenged to recall features of their social networks after more than a decade had elapsed. Before undertaking a detailed examination of the network size variable (and any of the network data), it is important to determine whether memory decay has had an impact on the quality of the network data, particularly with regard to the earliest recall period.

If memory decay poses a problem, we would expect to see differences in the reported network characteristics of respondents with older children, as compared to their counterparts with younger children. These differences could possibly take a number of forms, but it seems most likely that respondents with older children would have greater difficulty remembering all of their close associates and would therefore report
systematically smaller network sizes. In order to test this assertion I performed two kinds of analyses. First, I used the median age of respondent's oldest child (84 months or 7 years) to divide the sample into two nearly equal parts and performed a simple t-test to determine whether the two groups have significantly different network sizes. The 180 respondents whose oldest child is age seven or older have a mean network size of 3.9, while the 184 respondents whose oldest child is younger than age seven have a mean network size of 4.3. Respondents with older children do report smaller network sizes, but this difference is not significant (p>.10). This rather crude test certainly does not eliminate the possibility of memory decay and reliability problems in network data when the recall period is lengthy. Reported networks among respondents with older children were smaller, and there may be a drop-off in the ability to recall one's close associates after a certain amount of time has elapsed.

I performed a second test of the memory decay hypothesis by using OLS regression to predict network size. The regression model included the age of the respondent's oldest child in addition to a half dozen other predictive variables I examine in the next section. If memory decay exists, the age of respondent's oldest child should display a negative effect on network size; respondents with older children will have smaller networks. I found that the coefficient for age of respondent's oldest child was negative and significant (p<.01), supporting the memory decay hypothesis. However, further analyses revealed that this effect was present only for females (who comprise two-thirds of the sample), and that age of oldest child did not interact with any of the other substantive
variables. I can only speculate as to why this gender difference exists. One possibility is that men have a smaller but more stable set of persons whose opinion they would consider seriously when making important decisions. If so, then the challenge posed by a retrospective survey would not be so great, and memory decay would be less problematic.

In any case, the memory decay effect, while significant, is very small. The coefficient for age of respondent's oldest child in the model predicting network size for females is -.007. If the respondent's oldest child is 15 years old, the model predicts an average reduction in network size of about one tenth of an alter. Considering the very small magnitude of this effect, these tests provide some assurance as to respondents' ability to recall their social networks, even when many years have elapsed.

Network Size and the Transition to Parenthood

The means and standard deviations for all variables used in this chapter's analyses are reported in Table 4-1 (dependent variables) and Table 4-2 (independent variables). During the time just prior to their oldest child's birth, respondents reported seriously considering the opinions of an average of 4.2 persons when making important decisions. This is substantially smaller than the average network size reported in the Northern California Communities Study (see Fischer 1982), the study from which the name generator used here was drawn. However, the NCCS utilized eight separate questions to generate a single combined list of names, and this study used only one of those eight questions, so the comparison isn't very meaningful. More relevant as comparisons are the mean network sizes obtained in studies of discussion networks, such as the General Social
Survey (see Marsden 1987) and the Ten Towns Study (see Munch, McPherson, and Smith-Lovin 1997). These studies reported mean network sizes of 2 to 3 alters—smaller than the average of just over 4 alters reported here.

Several factors may account for the larger network sizes obtained here. First, the other network studies imposed a lower numerical limit on the number of alters a respondent could name and describe. The GSS, for example, imposed no limit on the number of alters a respondent could identify, but collected name interpreters on only the first five. Since only about five percent of respondents provided more than 5 names, networks containing six or more alters were collapsed into one category (see Marsden 1987). Similarly, the Ten Towns Study limited the size of discussion networks to the first five alters named. In the present study however, nearly a third of the respondents identified more than five network alters and a few identified the maximum of 16 permitted by the survey format. Thus the larger-than-average network sizes reported here can likely be attributed to the survey format itself—as demonstrated by the fact that when networks of six or more alters are collapsed into one category, the mean network size just prior to childrearing drops from 4.2 to 3.8.

But even after considering the differences in numerical limits, the mean network sizes reported here still larger than those observed in the other studies. This difference may result from the use of a name generator with slightly different content. Both name generators identify respondents' closest associates, but "Over the past six months, with whom did you discuss important matters?" is probably a finer screen than "Whose opinion
would you consider seriously when making important decisions?". The GSS/Ten Towns Study name generator contains a specific time frame ("over the past six months") as well as a requirement that the respondent have been in verbal contact with network alters, while the name generator used here has neither feature. This difference alone may impact reported network sizes (see Campell and Lee 1991). Unusual aspects of this research setting (the understimulated, captive audience of the jury pool) may also have encouraged respondents to enumerate their social networks with greater care and attention than they otherwise might, which might also result in larger network size.

Finally, larger network sizes in these data may be due to unique sample characteristics. Smaller network sizes observed in the Ten Towns Study are sometimes attributed to the sample of Nebraska residents which was slightly older and more rural than the GSS sample of the general population. In a similar vein, a sample of Pima County residents in their childrearing years exhibits certain properties known to affect network size. For example, the present sample is disproportionately young and female. Both of these features are associated with larger network size (see Marsden 1987; Moore 1990).

As in other studies, female respondents here tend to report larger networks than their male counterparts (see Table 4-1). Just prior to the birth of their oldest child, females report considering the opinions of an average of 4.4 persons. Males, in contrast, report considering the opinions of an average of 3.7 persons during the same period. This gender gap in network size is retained during the second measurement point, the time of
the oldest child's first birth day. One year after the birth of their oldest child, the average reported network size among women is 4.2, while men report an average of 3.6 network alters.

The most interesting aspect of the pre- and post-birth comparison of reported network size is that networks contract, though slightly, with the onset of childrearing. The average respondent drops 0.14 network alters in the year following the birth of their oldest child; this change is significant (p < .05, one-tailed test). It seems likely that a baby would increase the number of important decisions in a new parent's life, stimulating increased contact with network alters. The finding of network shrinkage is particularly striking in this regard and supports the most general hypothesis of this study, which is that the onset of childrearing is associated with network disruption. In order to more closely examine the changes in network size which accompany the onset of childrearing, I use OLS regression to predict network size at each of the two retrospective time periods, just before the birth of the oldest child and one year later. I then use the same procedure to model the change in respondents' network sizes during the one year period following the onset to parenthood.

**OLS Regression Models**

All of the models predicting network size (and change in network size) controlled for a number of factors potentially predictive of network size, including transition to parenthood timing, relationship status at the time of the child's birth, geographic moves which occurred during the 1-year period following the birth of the oldest child, gender role
ideology, Hispanic ethnicity, and sex. These variables were operationalized in the following manner:

The timing of the transition to parenthood was measured with a set of three dummy categories. Nineteen percent of survey respondents became parents prior to reaching age 21 (see Table 4-2 for separate-sex means). This segment of the sample was categorized as "early". "On-time" parents were those who had their children between the ages of 21 and 30; they comprise 51 percent of the sample. A final 30 percent of the sample constitutes the omitted category, "delayed" parents.

Dummy categories were also used to control for respondents' relationship status at the time of the birth of their oldest child. Four percent of the sample was living with (but not married to) a partner at the time of the birth of their oldest child. The largest component of the sample (84 percent) was married at the oldest child's birth. I divide this large component into two smaller categories: the 47 percent of the total sample who lived with their eventual spouse prior to marriage, and the 38 percent of the total sample who did not live with their spouse prior to marriage. Finally, 10 percent of the sample was not living with a spouse or partner at the time of the birth of their oldest child. This group constitutes the omitted category.

A final set of dummy categories accounts for geographic mobility during the time between the birth of the respondent's oldest child and that of the child's first birthday. Though kin ties are relatively stable across the life course, geographic moves are likely to be a source of disruption in relationships with friends, neighbors, and coworkers (see
Matthews 1986). Fourteen percent of respondents experienced a local move (within the same town or metro area) between their oldest child's birth and his/her first birthday. Eleven percent comprise a second category, who moved outside the local area. The omitted category (75 percent) did not experience a geographic move during the transition to parenthood. Since no data are available on moves prior to the birth of the oldest child, the dummy categories for geographic moves are not included in models predicting network size at the first time period.

In addition to these three sets of dummy categories, all of the models also included a measure of gender role ideology. Unlike the dummy categories, which were created using event history-style data, the gender role ideology data are strictly cross-sectional. Thus, the measure reflects respondents' beliefs at the time of the survey rather than at the time of the transition to parenthood, and the measure should be regarded only as an indicator of past gender attitudes. The gender role ideology measure was constructed by summing the Likert-type responses to four statements: "It is much better for everyone if the man earns the main living and the woman takes care of the home", "Preschool children are likely to suffer if their mother is employed", "Parents should encourage just as much independence in their daughters as in their sons", and "In a successful marriage, the partners must have freedom to do what they want individually". The first and second statements were reverse-coded, and the responses summed to yield a scale which could range from 4 to 20, with higher numbers signifying greater egalitarianism in gender roles. Scores on this index ranged from 8 to 20, with a mean of 14.8. Chronbach's alpha for this
index is 0.60; analyses with other indices of gender role ideology do not change the substantive results reported here.

All models controlled for Hispanic ethnicity and sex. Ethnicity was controlled by means of a dummy variable (1=Hispanic). Sex, on the other hand, was typically controlled by running separate models for males and females, as previous studies have demonstrated strongly gendered effects in the consequences of childrearing for social networks (see Munch, McPherson, and Smith-Lovin 1997), and combined sex analyses reveal significant gender interactions for the majority of dependent variables considered here. For dependent variables without significant gender interactions, the results of combined sex analyses are reported.

Finally, models predicting the change in network size controlled for respondents' network size at the first measurement period, just prior to the birth of the oldest child. (Obviously, models predicting network size itself cannot include this measure). Though initial network size is not substantively important, we might expect greater changes in network properties among those respondents whose networks are larger to begin with.

Regressions of Network Size Just before Parenthood and One Year Later

Results of the regression of network size just prior to the birth of the oldest child and one year later are reported in Tables 4-3 and 4-4 respectively. A simple comparison of the separate columns for men and women in Table 4-3 shows that different factors seem to account for expectant fathers' and mothers' network sizes. In fact, a combined sex analysis that tested the main effect of gender and of gender interactions with each of the
variables included in this model revealed a number of significant gender interactions ($F_{323}=1.861, p<.10$). For men, only relationship status is predictive of network size. Specifically, the coefficient of the dummy category for living with a partner outside of marriage is negative and marginally significant ($p<.10$). Compared to those men not living with a spouse or partner, those who cohabit with a partner have substantially smaller networks, all else equal. This finding is difficult to account for, and the effect is no longer present at the second measurement period, around the oldest child's first birthday (see Table 4-4). It is tempting to speculate that the shortness and intensity of some extramarital cohabiting relationships might cause participants to diminish social contacts outside of the relationship. Those expectant fathers who are not in a relationship, by contrast, might have more active social lives, and larger social networks as a consequence.

We see some support for the social integration effect of not living with a spouse or partner in the results for females; indeed expectant mothers in all categories of relationships have smaller network sizes than their counterparts who are not in a relationship in which they live with a spouse or partner. However, only the coefficient for the dummy category of women in the most traditional relationships (in which living together was delayed until after marriage) is marginally significant ($p<.10$). All else equal, these women have about one fewer network alter than their counterparts who lack a spouse or partner just prior to parenthood. For both male and female expectant parents, then, the largest network sizes tend to be found among those not in a close (living with spouse or partner) relationship. This is consistent with prediction 12A, presented in
Chapter 2. It may appear to be somewhat counter-intuitive since spouses and partners are certainly important figures in social networks, and indeed are often a source of other network alters, including friends and kin (see Matthews 1986). However, people in close relationships can rely on partners to meet many needs, including providing advice and assistance with regard to making important decisions. Those not in close relationships, by contrast, must rely on a wider array of network alters for this kind of assistance. These relationship status effects hold for expectant parents, but not parents of one year olds.

In addition to effects of relationship status, timing effects are present as well. These effects are present for women, but not for men. Prior to the birth of their child (see Table 4-3), women who delayed parenthood report significantly larger network sizes than their counterparts who start families early or on-time. This is consistent with prediction 1A. presented in Chapter 2. All else equal, the networks of delayed mothers are comprised of 0.677 more close associates than those of on-time expectant mothers (p<.10), and 1.694 more close associates than those of early expectant mothers (p<.001). However, by the time of the oldest child's first birthday (see Table 4-4), the benefits to network size of delayed parenthood are less marked. While older mothers still report 0.927 more close associates than their counterparts who start families early (p<.10), the difference between delayed and on-time mothers is no longer significant. Of course, these differences could result from shifts in the network size of either or both groups. Results from the next series of regressions (of changes in network size) will hopefully provide a clearer picture of how transition timing affects changes in mothers' network sizes.
Finally, we note that Hispanic mothers of one-year-olds tend to have significantly smaller networks than their non-Hispanic counterparts ($p<.10$). Though Hispanic ethnicity is commonly linked with network composition effects (particularly kin-centeredness), an association with size is unanticipated—and quite possibly spurious. Persons of Hispanic ethnicity tend to have lower educational attainment than their non-Hispanic counterparts (see Bean and Tienda 1987; del Pinal and Singer 1997), and education is positively related to network size (see Marsden 1987). The observed association between Hispanic ethnicity and network size may therefore result from ethnic differences in education. Unfortunately, the only education data available are respondents' highest degrees at the time of the survey—and including this present-time variable in the regressions of retrospective measures would be problematic. However, we can use these data to determine whether this hypothesized relationship between ethnicity, education, and network size is plausible.

The education variable describes respondents' highest degree attained at the time of the survey and is coded ordinally in the following manner: 8th grade=1; high school diploma or GED=2; Associates or vocational certification=3; Bachelors (B.A. or B.S.)=4; and graduate degree=5. Mean education for Hispanics and non-Hispanics is 2.85 and 3.29 respectively, confirming significantly lower average educational attainment among Hispanics in this sample ($p<.01$). Moreover, education appears to be positively related to network size for Hispanics and non-Hispanics alike. For example, mean network size among non-Hispanics with high school diplomas, vocational certifications, and 4-year
degrees is 2.96, 3.76, and 7.83 respectively. While not precluding a true association between ethnicity and network size, this further exploration of the data tends to support the above assertion that smaller networks among Hispanic mothers may result from ethnic differences in educational attainment.

Regression of the Change in Network Size

Results of the regression of change in network size for men and women are reported in Table 4-5. As shown in the left column, only initial network size is predictive of the change in men's network size during the transition to parenthood. Similarly, the coefficient for initial network size is significant and negative for women, indicating that larger initial network size is associated with greater reductions in network size during the transition to parenthood for both men and women. The coefficient for Hispanic ethnicity is also negative and significant for women (p<.05). All else equal, the transition to parenthood leaves Hispanic women with 0.579 fewer alters than their non-Hispanic counterparts. As discussed in the previous section, the significantly smaller networks among Hispanic mothers are probably the result of ethnic differences in educational attainment. However the tendency for Hispanic mothers to drop network alters at a greater rate than their non-Hispanic counterparts following the transition to parenthood cannot be attributed to educational differences exclusively. Other factors, such as the gendered distribution of child care and domestic work (to be examined in the next chapter) may also play a role in the ethnic differences observed here.

Even more than the results of the previous regressions predicting network size,
these findings clearly support the hypothesis that timing is an important mediator in the process of network adjustment following the transition to parenthood—but the timing effect is present only for women. I predicted in Chapter 2 that those who violate transition timing norms would experience the greatest network disruption with the onset of childrearing responsibilities, due to lack of support from peers undergoing the same transition. Following this logic, both early and delayed parenthood would be accompanied by more network disruption, as compared to the network adjustment stimulated by parenthood which is normatively timed. These predictions appear to be borne out in the results.

As shown in Table 4-5, the regression coefficient for on-time parenthood is positive and significant, indicating that all else equal, the change in network size among women who start their families on-time (age 21-30), is significantly different from that experienced by women who delay childbearing until after age 30 (p<.05). If we assume a non-Hispanic woman had married (without living with her partner first) at the time of childbearing, had an average score on the gender role ideology index (15.106), an average initial network size (4.420), and no geographic moves, then the timing effect predicted in this model translates into a net increase of 0.211 network alters for on-time mothers. Using the same set of assumptions, the woman who delays childbearing until after reaching her third decade experiences a net decrease of 0.336 network alters.

But, as illustrated in Figure 4-1, we can make even more accurate predictions by assuming a specific initial network size for each transition timing group (generated from
Table 4-3). Assuming a non-Hispanic expectant mother was married (without first cohabiting) and had the mean score on the gender ideology index, then the model shown in Table 4-3 predicts the following network sizes for transition timing groups: early = 3.283; on-time = 4.302; and delayed = 4.978. Now, if these group-specific values are inserted into the model in Table 4-5 predicting change in network size (with all of the other assumptions held constant), then the resulting predictions are even more telling. Early mothers experience a net increase of 0.253 alters, boosting their network size to 3.536. On-time mothers experience an even greater net increase of 0.239 alters, pushing their network size up to 4.541. And delayed mothers experience a net decrease of 0.468 alters, leaving them with 4.510 alters.

As predicted in Chapter 2, the adjustments in network size which accompany the onset of parenthood are most favorable for mothers whose childrearing is normatively timed. Along with new parenthood come greater responsibilities, greater potential for social isolation, and concomitantly, a greater need for social support. Based on these reported changes in network size, it appears that on-time mothers are in the best position to receive the social support they might need in order to navigate the changing expectations and responsibilities of this role transition. In comparison to on-time mothers, early mothers have smaller initial network sizes and smaller net increases in network size with the transition to parenthood. Delayed mothers, by contrast, have substantially larger initial network sizes, but also a large decrease in network size with the transition to parenthood. In fact, the transition leaves delayed mothers with fewer network alters than
women who start families on time. Though delayed childbearing has its benefits, one of its drawbacks appears to be a relatively greater disruption in network size. The loss of nearly half of a close confidant is substantial and possibly ill-timed, occurring just when the need for social support may be particularly acute.

Some portion of these observed timing effects may well be spurious; education was not included in these models and is associated with both transition timing and network size. As explained in Chapter 2, education is associated with transition timing because women tend to curtail schooling when they have children early (see Rindfuss, Bumpass, and St. John 1980; Upchurch and McCarthy 1990). Relatedly, women with ambitious educational (and occupational) goals often delay childrearing until those goals are attained. In the sample of mothers here, the association between education and transition timing is clear. The mean highest degree attained is 2.38, 3.13, and 3.52 for early, on-time, and delayed mothers respectively. Moreover, women who delay childbearing have significantly higher educational attainment than women who start their families earlier (p<.001). Given the positive relationship between education and network size, some of the timing effects observed here may be the result of education effects which were not controlled in these analyses. However, it is difficult to explain away the fact that delayed mothers' networks shrink more with the onset of childrearing (even when initial network size is controlled). Of course we don't yet know which alters are most likely to be dropped from a delayed mother's circle of intimates, or whether more frequent contact with a smaller sub-set of alters is substituted for less frequent contact with a larger
network. These issues will be discussed in the following sections.

**Contact Frequency and the Transition to Parenthood**

Contact volume is a measure describing the number of annual contacts in a respondent's ego network. On the name generator chart, respondents were asked to indicate how often they usually talked to each of their alters. Possible responses were assigned a numerical value in the following manner: almost every day=365; at least once a week=52; at least once a month=12; and less than once a month=6. The contact volume measure was created by summing each of these values across each of the respondent's alters. In theory, this measure could range from 0 to 5,840 (16x365). However, the maximum contact volume reported here is 2,920 and the mean pre-birth contact volume is 690.16.

As expected, the mean contact volume reported here is larger than that observed in the Ten Towns Study. While men and women report mean contact volumes of 522.00 and 774.23 respectively here, the parallel figures for parents in the Ten Towns are 453.26 and 497.46 (see Munch, McPherson and Smith-Lovin 1997). This substantial inter-study difference in mean contact volumes is expected because the two studies differ in reported network size, and network size is a component of the contact volume measure.

As predicted in the Chapter 2, contact volume drops during the transition to parenthood. Men lose an average of 9.36 annual contacts with network alters, while women lose an average of 24.53. But given that networks shrink in size, a decline in total contacts is not unexpected; in fact, it is somewhat definitional. Since we know that the
transition to parenthood is accompanied by changes in network size, and since network size is a component of the contact volume measure, these reported changes in contact volume may result from changes in network size, changes in contact frequency, or both. In order to disentangle these possibilities, and to develop a more detailed understanding of the various correlates of the change in contact volume which accompanies the transition to parenthood, OLS regressions were performed on three measures: pre-birth contact volume, contact volume at the oldest child's first birthday, and change in average contact frequency.

*Regressions of Contact Volume Just before Parenthood and One Year Later*

Regression models predicting contact volume just before parenthood included controls for transition timing, relationship status, gender role ideology, Hispanic ethnicity, and network size just before parenthood. Those predicting contact volume around the time of the oldest child's first birth were similar, but also controlled for geographic moves during the one year period following the birth of the oldest child. Additionally, network size around the time of the oldest child's first birthday was substituted for pre-birth network size in models predicting contact volume in the second time period. A combined sex analysis was used to evaluate the presence of significant gender interactions and revealed none. Thus the results of contact volume regressions are displayed in a combined sex format. These models are displayed in Tables 4-6 and 4-7, respectively.

The most distinctive feature of the contact volume regression is the rather high R-square values, resulting from the inclusion of network size in the model (network size and
contact volume are definitionally linked). Larger networks tend to be associated with significantly higher contact volumes (p<.001 both before and after parenthood), all else equal. However, the network size effect does vary by sex, as shown in Table 4-7. Prior to parenthood, the main effect for sex is positive and significant (p<.05), indicating that women tend to have just over one hundred more annual contacts with their alters than men do, all else equal. After parenthood, the main effect for sex is no longer significant. However the coefficient for the interaction of sex and network size is significant at the post-parenthood observation (p<.10). The coefficient describes a relationship whereby sex differences in contact volume are related to network size. All else equal, sex differences in contact volume tend to be greater when network sizes are larger. For example, women average 20 more annual contacts than men when network size is one. When network size is six, the difference amounts to over 150 annual contacts.

Many other factors are predictive of contact volume as well, but they become less predictive in the year following parenthood. Thus, associations that were present prior to parenthood are weakened after it. For example, as shown in Table 4-6, both gender role ideology and relationship status are predictive of contact volume prior to parenthood. All else equal, expectant parents with an egalitarian gender role ideology tend to have more annual contacts than their traditional counterparts (p<.10). Though not reported here, separate sex analyses revealed that this is particularly true of men. Men with a traditional gender role orientation may feel some reluctance to openly express feelings and other personal concerns and may therefore tend to confide primarily with their spouses or
partners, to the exclusion of all others. This sort of decision consulting pattern would be evidenced in smaller networks and contracted contact volumes. It is interesting, however, that following parenthood, these gender role differences in contact volume are no longer present.

Similarly, the contact volumes of married expectant parents differ from those of expectant parents who are not in relationships. In the year following the birth of a child, however, these differences are no longer present. All of the coefficients for relationship status categories are large and negative, indicating that expectant parents who live with a spouse or partner have fewer annual contacts than their counterparts who do not, consistent with prediction 12A. However, only those in the most traditional group (who marry without first cohabiting with their partner) are significantly different than the omitted category (p<.10). As discussed in Chapter 2 and in the previous section on network size, it is likely that people living with a spouse or partner can rely on that one network alter to meet many of their needs. Without such an arrangement, single parents are likely to keep a larger set of network alters. These results suggest that single parents may also compensate by having more frequent contact with those alters, though the results for contact volume are weaker than those for network size, and the association is no longer present in the year following parenthood.

Transition timing continues to play an important role in the contact volume results, though as with sex, gender role ideology, and relationship status, the power of the association is weakened in the second observation period. In terms of timing, it is
apparent that delayed expectant parents have the least frequent contact with their associates. The coefficient for early parenthood is positive, significant, and large, indicating that, all else equal, very young expectant parents have hundreds more annual contacts with their network alters than their counterparts who delay parenthood (p<.001), while on-time parents average about 90 more annual contacts than their delayed counterparts (p<.10). However, these coefficients are somewhat deceptive, as we know that network size differs substantially among the three timing groups, at least for women. If we insert the group-specific means for network size (obtained from Table 4-3, see previous discussion) into the model and use the assumption of a non-Hispanic woman who lived with her spouse only after marriage and had the mean score on the gender role ideology index, then the resulting differences in contact volume among timing categories are not nearly so pronounced. Predicted mean network sizes for early, on-time, and delayed expectant mothers respectively are 3.283, 4.302, and 4.978. Using these predicted values, mean contact volumes prior to parenthood for early, on-time, and delayed expectant mothers respectively are predicted to be 697, 670, and 663.

While delayed mothers do have fewer annual contacts with their network alters than their counterparts who start families early, this difference is one of tens rather than hundreds. And though present at both time periods, the significance and magnitude of the effect decrease in the second observation period, around the time of the oldest child's first birthday (see Table 4-7) such that only early parents are significantly different from their delayed counterparts. Still, this is an interesting finding in light of the fact that delayed
mothers were so advantaged with respect to network size just prior to parenthood. The results for contact volume suggest that while delayed parents have more associates than their counterparts who start families earlier, they have fewer annual contacts with those associates, all else equal. But as in the results for network size, the differences between the three transition timing groups becomes less marked after the transition to parenthood, when parenthood seems to have somewhat of an equalizing effect on the three groups.

The effect of Hispanic ethnicity is strongly significant both prior to and after parenthood (p<.001 for both observations). All else equal, Hispanic expectant parents have nearly 228 more annual contacts than their non-Hispanic counterparts. After parenthood, the ethnic difference of 186 annual contacts is less pronounced, but still large. We know from previous analyses (see Tables 4-3 and 4-4) that Hispanic expectant parents tend to have similar network sizes as their non-Hispanic counterparts, while Hispanic parents of one-year-olds may tend to have smaller networks than their non-Hispanic counterparts. Since network size is held constant in the models predicting contact volume, true ethnic differences are being somewhat overstated by the magnitude of the coefficient reported in Table 4-7. Though ethnic differences remain prominent, it appears that the two ethnic groups may develop more similar contact patterns following the onset of parenthood. To examine these changes more closely, we turn to the regressions of change in contact frequency.

Regressions of the Change in Mean Contact Frequency

Because network size is such an important component of the contact volume
measure, it is necessary to control for changes in network size when investigating any changes in contact volume. Several approaches to this issue are possible; I chose to create a new measure, mean contact frequency (contact volume divided by network size for each observation period). This measure reflects the average number of annual contacts across all alters. Change in mean contact frequency is defined as mean contact frequency before parenthood subtracted from the same measure at the oldest child's first birthday.

Prior to parenthood, women's mean contact frequency, at 188.19 is significantly larger than men's. But while women's mean contact frequency remains remarkably stable across the two measurement periods, men's contact frequency exhibits an increase from 139.86 to 151.86. Both men and women report a slight contraction in network size during this period, but while women talk with their close associates at about the same frequency as before parenthood, it appears that new fathers shift their emphasis toward more frequent contact with a smaller set of network alters.

In order to examine these issues in greater detail, I used OLS regression to predict changes in mean contact frequency for men and women. However, a combined sex analysis revealed no significant gender interactions, so the regression results reported in Table 4-8 retain the combined sex format. Unlike the results of previous regressions, these models explain hardly any of the variance in the change in mean contact frequency. This is somewhat surprising since there are significant shifts in mean contact frequency, at least among men. The fact that the increase in men's contact frequency is not affected by any of the included variables may signify that the change in men's contact frequency is an
inherent product of the role transition to parenthood.

The regression results reported in Table 4-8 demonstrate the continued importance of transition timing. The coefficient for early parenthood is negative and significant, indicating reduced contact frequency for young parents as compared to those who delay childrearing (p<.05). Assuming non-Hispanic female was married before having a baby, had an average score on the gender role ideology index, and no geographic moves during the year following parenthood, then the effect of being under 21 translates into a decrease of 24.44 in the number annual contacts per alter. The same set of assumptions leads to an increase of 10.55 in the mean contact frequency of parents who delay childrearing until after age 30. This result may have much to do with the roles and resources available to those who become parents at different ages.

Together with the regressions of changes in network size, these findings provide strong evidence that women who delay motherhood maintain a more stable contact frequency by increasing their contact with a reduced set of network alters. In this regard, their network adjustments may somewhat resemble those undergone by men during the transition to parenthood, though the evidence for men is much more tenuous. Conversely, younger women appear to maintain a more stable set of associates, but to reduce their contact with them dramatically following the onset of parenthood. On-time mothers seem to have the best of both worlds, as their frequency of contact remains stable, while network size increases slightly. These findings are generally consistent with prediction 1B, presented in Chapter 2. Of course, if new parents drop some ties in favor of others, we
would like to know which ones. In the next sections, I conduct a detailed examination of parents' alters' characteristics.

**Proportion Kin and the Transition to Parenthood**

Relatives play an important role in the roster of survey respondents' closest associates; indeed the majority of network alters reported here are kin. Prior to parenthood, the proportion of men's and women's network alters who are kin (including spouse or partner) averages 64 and 70 percent respectively. The comparable figures from the subsample of parents in the Ten Town Study are 53 and 57 percent (see Munch, McPherson, and Smith-Lovin 1997). Even though both studies sought to measure respondents' closest associates, the difference in kin composition could be the result of slightly different name generators. Another possibility is that the family-centered nature of the study and the way it was presented to the respondents acted as a subtle cue, biasing them toward prioritizing family ties.

In keeping with their reputations as the family "kin-keepers" (see Bott 1957; Fischer 1982; Moore 1990), women tend report more kin-centered networks than men. However, the gender gap is not significant. Consistent with the predictions made in Chapter 2, men's and women's networks become more dissimilar (in terms of proportion kin) over the one year period following the oldest child's birth, indicating that childrearing itself may play a part in the processes by which gender differences are created and maintained. However, while the proportion kin in women's networks remains stable, the proportion kin in men's networks declines with the onset of parenthood. This result is
consistent with prediction 6A, however my assumption that kin composition would increase for both men and women was faulty. In order to account for these findings, we must turn to the regression results.

**Regressions of Proportion Kin Just before Parenthood and One Year Later**

Tables 4-9 and 4-10 report results of separate sex regressions predicting proportion kin just before the birth of the oldest child and one year later. A combined sex analysis that tested the main effect of gender and of gender interactions with each of the other independent variables revealed significant gender interactions ($F_{9, 319} = 2.152$, $p < .05$).

The models reported here include the same set of independent variables as was used in previous models, with the addition of a control for network size. The control for network size is important because compositional measures (e.g., density, proportion kin, proportion coworker, etc.) are inherently at risk of selectivity bias when networks are small (see Marsden and Hurlbert 1987). For example, networks of size zero are automatically comprised of zero percent kin. Networks of size one are either zero percent or 100 percent kin. Simply controlling for network size helps to address this issue.

The strongest effect in these models is that of Hispanic ethnicity, for males. Hispanic males are much more kin-centered than their non-Hispanic counterparts, having around 25 percent more kin, all else equal ($p < .01$). This finding is consistent with prediction 15A and with other network studies. For example, Schweizer et al. (1998) observed a similar ethnic disparity in Costa Mesa, California, where the networks of Anglos were comprised of 42.6% kin, while those of Hispanics were comprised of 73.3%
kin. In this study, non-Hispanic males have networks comprised of around 57 percent kin just prior to parenthood, while Hispanic males' networks are 82 percent kin—using the assumption of an on-time father with average network size (3.743) and average gender role ideology (14.301) who married before living with his spouse. Using the same set of assumptions, these men become slightly more kin-centered following parenthood, when the kin composition of their networks rises to .59 and .87 respectively for non-Hispanics and Hispanics. Of course, the stereotype of Hispanic kin-centeredness is not new, and evidence for it has been presented in social science literature in various formats (see Vega 1990 on la familia). The results presented here verify that when making important decisions, Hispanic males prefer confidants with kin ties. It is interesting to note, however, that there are no significant ethnic differences in the kin composition of personal networks among women. Perhaps the kin-keeping role of women spans both cultures.

The finding of greater kin composition among Hispanic males adds to the accumulated evidence for ethnic differences in network relations among parents. While the smaller network sizes of Hispanic females may result from lower educational attainment, the finding of greater contact volume among Hispanics of both genders is more difficult to account for. However, if Hispanics are family-oriented, as popular wisdom and the proportion kin analyses presented here suggest, then greater contact volume among Hispanics could come about as a result of frequent contact with family members. There is some support for this explanation in the data. First, Hispanics tend to live geographically closer to their kin alters than non-Hispanics (see also Wagner 1988;
Schweizer et al. 1998). Geographic driving distance was measured ordinally in the following manner: 1=under 5 miles; 2=under 1 hour; 3=under 1 day; and 4=over 1 day. Data from the first time period (just before the birth of the oldest child) show that the average geographic distance between Hispanics and their kin alters is 1.488, while the distance between non-Hispanics and their kin alters averages 1.788. This difference is significant (p<.01). Moreover, Hispanics tend to talk with their kin alters more frequently. Just before the birth of the oldest child, average contact frequency with kin alters is 215.81 for Hispanics and 177.04 for Hispanics. Around the time of the oldest child's first birthday, average contact frequency with kin alters rises slightly among Hispanics to 217.66 for Hispanics and drops to 168.55 for non-Hispanics. Both differences are significant (p<.05). Taken together, these findings support that idea that the greater contact volume among Hispanics observed here comes about as a result of frequent contact with kin.

While the ethnic differences are certainly the most pronounced of the group differences in kin composition, further exploration of the results indicates that there are also significant differences in kin composition among transition timing groups for women. Specifically, on-time mothers have the most kin in their networks, 11 percent more than their counterparts who delay childbearing, all else equal (p<.05). The finding that delayed mothers have the smallest kin composition among the three timing groups is consistent with prediction 2A. However, I had also predicted that early parents would have the largest kin composition; this part of the prediction was not supported by the results. It is
important to note that since the model controls for network size, differences in kin composition are not the result of the earlier finding that older mothers tend to have larger social networks (larger networks might feature similar numbers of kin, but therefore a lower proportion of kin in the network). In previous analyses, we observed the tendency for group differences in network properties to be less distinct following parenthood. That is the case here as well; the timing effect that was present before parenthood is absent after it—and there is good evidence as to why.

Only the regression model for the second time period (around the time of the oldest child's first birthday) includes controls for geographic moves. When these controls are introduced, timing effects are no longer significant. As shown in Table 4-10, mothers who moved outside of their local area have about 13 percent more kin in their networks, all else equal (p<.05). Probably persons who move away from their friends and coworkers find themselves relying more on their durable network ties to kin for advice and assistance, at least until other strong ties are formed in their new place of residence. Interestingly, the propensity to move outside one's local geographic area is strongly related to age. On-time and early mothers are the most likely to move outside their local area in the year following parenthood's onset; 11 percent of on-time mothers experienced such a move, while 18 percent of early mothers did. Compared to their younger counterparts, delayed mothers were significantly less likely to move outside their local area (p<.001), or even to move at all (p<.01). It is likely that mothers who postpone childrearing until their third decade have already established a career and purchased a home to live in, giving them greater
geographic stability. The evidence here suggests that if they consult kin less when making
important decisions, this probably results from the relatively consistent set of non-kin in
their networks, which greater geographic stability provides.

*Regressions of the Change in Proportion Kin*

Table 4-11 displays a final set of regressions on this topic, the change in proportion
kin. The results for women confirm the previous finding that having recently moved
outside one's local geographic area increases the importance of kin in the network.

Following the transition to parenthood, female movers experience a 10 percent larger
increase in the kin composition of their networks than females who do not move, all else
equal (p<.10). Though the proportion of kin in all women's networks remains quite stable
over the period considered here, those women who move do appear to make significant
adjustments in their network, particularly by prioritizing kin ties.

In the one year period following the transition to parenthood, men who live with a
spouse or partner tend to increase the kin composition of their networks, as compared to
their counterparts who do not live with a spouse or partner. It is almost definitional that
men who do not live with a spouse or partner would tend to have a smaller proportion of
kin in their networks, since spouses and partners were both included in the definition of
kin. These regression results suggest that following the transition to parenthood,
differences between the men who have spouses or partners and those who don't become
even greater with respect to kin-centeredness. But among all relationship status
categories, only men in the most traditional category (those who did not cohabit with their
eventual spouse before marriage) are significantly different from the omitted category (p<.05), increasing their kin composition by about 25 percent, all else equal. It is not surprising that the birth of a child causes married men to give greater priority to family members in their networks. If ties to parents or in-laws were not strong to begin with, they may become more so when a new baby becomes the basis for frequent interaction. Men who do not live with a spouse or partner lack some of the basis for this bond, since the presumption of maternal custody makes it unlikely that they live with their child.

Proportion Female and the Transition to Parenthood

Females comprise a majority of expectant and new parents' alters. This is not surprising, since even the biological functions of females (in terms of pregnancy and lactation) give them greater experience with respect to the processes of childbearing and childrearing. Moreover, most childcare (paid and unpaid) is performed by women. If pregnancy, parenting, and childcare are among the topics that new and expectant parents might need to make an important decision about, then it seems likely that the desired consultant would be female.

In Chapter 2 I predicted (see 10A) that men and women would become more female-centered in the year following the birth of their child, as they are drawn into greater contact with their spouse or partner, other female relatives, and possibly a childcare provider. This trend was first identified in the earlier study (Munch, McPherson, and Smith-Lovin 1997) which showed that male parents of young children have more female-centered networks than males with older children. However, over the one year period
considered here, the males in this study do not become more female-centered, in contrast to prediction 10A. In fact, the proportion female among men shrinks from slightly from .55 to .53. Other studies have observed a generally lower proportion female in men's networks (e.g., .45 in the Ten Towns subsample of parents), so it is possible that the prioritization of female ties had already occurred by the time of the first observation point, just before the birth of the expected child. Interestingly, women also become less female-centered over the period observed here (proportion female drops slightly from .62 to .59), supporting the hypothesis presented in the first chapter. However, the change in proportion female is not significant for either sex.

Regressions of Proportion Female Just before Parenthood and One Year Later

Regressions of proportion female just before the birth of the oldest child are displayed in Table 4-12. Those for the second observation point, around the time of the oldest child's first birthday, are displayed in Table 4-13. No results for regressions of the change in proportion female are provided, as none of the included variables was helpful in predicting the change, which is, in any case, very slight.

A combined sex analysis that tested the main effect of gender and of gender interactions with each of the other dependent variables included in this model revealed many significant gender interactions ($F_{9, 319} = 4.178, p < .001$). Not surprisingly, a comparison of the separate sex columns in Table 4-12 reveals that several factors appear to affect men and women differently. For instance, men who live with a spouse or partner generally have a lower proportion female in their networks than their counterparts who do
not live with a spouse or partner, while women who live with a spouse or partner
generally have a higher proportion female in their networks than their counterparts who
do not live with a spouse or partner. But of the three relationship status coefficients, only
those for living with a partner outside of marriage are significant (p<.05 for males; p<.01
for females). All else equal, males who live with a partner extramaritally have nearly 50
percent fewer females in their networks, as compared to those not living with a spouse or
partner. Similarly, females who live with a partner extramaritally have nearly 25 percent
fewer males (or 25 percent more females) in their networks, as compared to those not
living with a spouse or partner. For females, the effect is retained in the second
observation point (see Table 4-13). For males, it is not.

The strong proscription against opposite-sex friendships among married persons of
both sexes (see Matthews 1986) can likely account for these results. Thus the negative
signs of coefficients in the column for males and the positive signs of coefficients in the
column for females result from the same mechanism. While persons not living with a
spouse or partner have fewer proscriptions against opposite-sex friendships, married
persons are more limited in who they can be friends with. Persons living together
extramaritally are perhaps most limited as their relationship status is more ambiguous and
any opposite-sex friendship could be interpreted as potentially threatening by the involved
parties.

Like relationships status, Hispanic ethnicity also seems to affect males and females
quite differently. All else equal, Hispanic males have a larger proportion of females in
their networks than non-Hispanic males (p<.05), while Hispanic females have a smaller proportion of females (or a larger proportion of males) in their networks than non-Hispanic females (p<.01). Both effects are retained in the second observation point (see Table 4-13). This finding adds to the growing list of ethnic differences in the networks of expectant and new parents. And like some of the other findings, it may possibly result from the family orientation that characterizes Hispanic culture.

In order to investigate this possibility, I explored ethnic differences in the proportion of opposite-sex kin named as alters in males' and females' networks. Just before parenthood, the proportion of female family members in Hispanic males' networks averaged .68. By contrast, the proportion of such alters in non-Hispanic males' networks was .45. This difference is significant (p<.01). Thus, there is evidence to suggest that greater proportion of females named by Hispanic males results from kin-centeredness. However, kin-centeredness does not explain the ethnic difference in propensity to name opposite-sex alters among females. Approximately one-third of the networks of both Hispanic and non-Hispanic females are comprised of male kin. The greater proportion of males named by Hispanic females must be accounted for in some other way.

Gender role ideology is also predictive of proportion female; in this case the effect is the same for both men and women. Among men, this relationship is consistent with prediction 10C, presented in Chapter 2. However the observed association between gender role ideology and sex composition among women is exactly the reverse of that predicted in 10C. All else equal, greater gender egalitarianism is correlated with greater
female composition in the network (p<.05 for both males and females). The effect is especially pronounced for males. In the second observation period, a father who scores 18 on the gender role ideology index averages 21 percent more females in his network than his counterpart with a score of 10. The magnitude of the female gender role ideology coefficient is about half the size of the male coefficient, and its significance is not retained at the second observation point.

The apparent effect of gender role ideology could be the result of differences in education. There is some evidence to suggest that more educated persons rely less on kin and more on friends when making important decisions (e.g., Bott 1957; Marsden 1987). And while kin are usually heterogeneous with respect to gender, friends tend to be gender homogeneous, due to the proscription against opposite-sex friendship discussed above. The tendency for egalitarian women to have more female networks could be accounted for in this way. However, the same logic would point toward less female-centeredness in egalitarian men’s networks--directly contradicting these results, so something else must explain the effect of egalitarianism on the female composition of men’s networks.

Egalitarianism may affect the sorts of decisions a man views as important, which may in turn affect whom he would consult when making such decisions. Since relatively traditional/inegalitarian men support role segregation in the breadwinning/economic and domestic spheres, it seems likely that the important decisions in their lives would involve their own, male-oriented spheres. More egalitarian men, by contrast, would have greater involvement in domestic/familial spheres, and therefore greater involvement with females.
This might account for the female-centeredness of gender egalitarian men.

Finally, transition timing is also an important predictor of proportion female for women. Both early and on-time mothers have significantly greater proportions of females in their networks, as compared to their counterparts who delay childbearing. Just before parenthood, both categories of younger mothers have about 10 percent more females in their networks, all else equal (p<.05 for early mothers; p<.01 for on-time mothers). One year later, the difference remains relatively stable; early mothers have about 13 percent more females in the networks, while on-time mothers have about 9 percent more (p<.01 for early mothers; p<.05 for on-time mothers). Possibly less career-oriented, younger mothers may have a greater tendency to stay home with a child, and therefore to develop a relationship with similar female neighbors. If they do work outside the home, they may have a greater tendency to work in female-dominated occupations than their counterparts who delay childbearing. To the extent that delayed mothers remain occupationally-engaged, their relatively advanced positions may put them in a slightly more male-dominated world of work, which would account for the lesser proportion of females in their networks.

To summarize briefly, the gender composition of expectant parents' networks remains quite stable over the one year period examined here. Despite this stability, cross-sectional analyses from the two observation points are informative. For men, female composition is positively associated with gender egalitarianism and Hispanic ethnicity, and negatively associated with living with an extramarital partner. For women, female
composition is positively associated with younger childbearing and living with an extramarital partner, and negatively associated with Hispanic ethnicity.

**Proportion Friend and the Transition to Parenthood**

Previous research has demonstrated that women tend to rely on at least one close and confiding friendship in addition to their spouse or partner, whereas men are more likely to consider their spouse as their sole confidant (e.g., Gerstel 1988a; Oliker 1989). However, in this study respondents of both genders named nearly equal proportions of friends in their networks. Just prior to parenthood, women’s networks are comprised of 20.8 percent friends, whereas 18.0 percent of men’s networks are friends. One year later, females and males are even more similar with respect to the friendship composition of their networks, reporting 20.0 and 19.8 percent friend respectively. I predicted in Chapter 2 (7A) that both men and women would become less involved with friends following the transition to parenthood, but that the decrease in friend composition would be more pronounced among women. In fact, the friendship composition of both men’s and women’s networks is generally quite stable over the period considered here.

Though proportion friend remains highly stable, the cross-sectional analyses of proportion kin are still of interest. Results of regressions predicting proportion friend just before the birth of the oldest child and one year later are reported in Tables 4-14 and 4-15. These results are presented in combined-sex format, as no significant gender interactions were revealed in the analyses. Additionally, no regressions of the change in proportion friend are reported here, as no significant change in friendship composition was observed.
over the one year period following the onset of parenthood.

Even if gender interactions do not make a significant contribution to the models, we would expect analyses to reveal significant main effects of gender. The analyses are striking for the absence of these also. In the year following the birth of the oldest child, however, there are gender differences in the way that transition timing affects friendship composition. As indicated in Table 4-15, there are significant differences in friendship composition among transition timing groups, such that all else equal, early parents name nearly 20 percent fewer friends as decision consultants, compared to their counterparts who delay childrearing ($p < .05$). Similarly, on-time parents also name fewer friends ($p < .05$) than delayed parents, but the difference is a more modest one of 6 percent.

Interestingly, the coefficient describing the interaction of gender and early timing is also significant ($p < .05$), but positive, indicating that young mothers tend to name nearly 19 percent more friends than young fathers do. Taken together, these findings illustrate a significant gender/timing interaction. There are no significant gender differences in the friendship composition of most parents' networks. However the subset early parents is unique. While young mothers cannot readily be distinguished from other timing groups, young fathers are distinctive for the fact that they have very few friends.

Had there been significant timing group differences in men's proportion kin, it would be tempting to postulate that—perhaps as a result of differences in education—older fathers are more involved with friends, while younger fathers are more kin-centered. This prioritization of kin ties might then explain the de-prioritization of friendship ties observed
here. However, kin-centeredness among men undergoing the transition to parenthood is not a function of transition timing, and in fact, men's transition timing has not played an important role in determining any of the network properties examined here so far. But education is associated with friendship composition in social networks (Marsden 1987) and is also strongly correlated with transition timing (though less so for men than for women). Thus, the apparent timing effect could be the result of educational differences among the timing groups, which were not controlled for here.

In addition to transition timing, friendship composition is also correlated with relationship status. Consistent with prediction 14A, both before and after parenthood, married respondents name significantly fewer friends (nearly 10 percent fewer) as decision consultants than their counterparts who do not live with a spouse or partner. Since spouses can be consulted about nearly all types of important decisions, parents with spouses might find themselves consistently turning to a conveniently located spouse when advice is needed. As kin, friends, and other kinds of ties are consulted less frequently, the strength of these other associations may even be decreased. In contrast, parents without a spouse or partner to consult in this manner will likely rely on others, including friends. These patterns of association are well-expressed in the friendship composition differences revealed in these analyses.

Finally, we note that Hispanics have a smaller proportion of friends in their networks than non-Hispanics, all else equal, consistent with prediction 16A. Ethnic group differences are significant both before (p.<01) and after (p.<.001) parenthood. Though the
effects are similar, the ethnic differences in proportion friend are probably the result of sex-specific mechanisms. Hispanic males tend to report more kin and fewer friends in their networks, all else equal. When kin ties are prioritized, it appears that there will be fewer non-kin relations as a result. However, Hispanic females do not report more kin in their networks. They do, however, report significantly fewer females in their networks, as discussed in the previous section. Given that friendships tend to be same-sex, it appears that the comparative deficit in both females and friends among Hispanic women comes about as a result of fewer female friends.

Proportion Coworker and the Transition to Parenthood

Though most respondents appear to prefer kin and friends as consultants when making important decisions, coworkers are also frequently named in personal networks—perhaps because work is the place where many adults pass much of their waking time, and perhaps also because important decisions are part and parcel of many occupations. Prior to parenthood, men and women name coworkers as network alters with about equal frequency: 7.6 percent for men and 6.1 percent for women. As predicted in Chapter 2 (8A), both genders become less involved with coworkers following the transition to parenthood, but the deprioritization of coworkers is especially characteristic of women. Around the time of the oldest child's first birthday, 6.0 percent of men's networks are comprised of coworkers, while only 3.3 percent of women's networks are. The gender difference in coworker composition following parenthood is significant (p<.05), and probably reflects the fact that many women reduce their involvement with paid work
during the early years of childrearing.

Regressions of Proportion Coworker Just before Parenthood and One Year Later

Regression results help us to see which factors explain parents' involvement with coworkers. A combined sex analysis that tested the main effect of gender and of gender interactions with each of the other variables revealed a number of significant gender interactions ($F_{12, 315} = 2.733, p < .01$). Thus Tables 4-16 and 4-17 display separate sex regressions of proportion coworker just before parenthood and one year later. As indicated by the R-square values of the tables, the models are better at predicting proportion coworker in men's networks than in women's. In fact, transition timing is the only substantive factor predictive of women's network coworker composition, with early mothers reporting significantly fewer coworkers than delayed mothers, all else equal ($p < .10$), as predicted (4A). Using the assumption of a non-Hispanic woman of average network size and gender role ideology who married without first living with her partner, the model predicts proportion coworker values of .037 and .083 for early and delayed mothers respectively. Given that delayed mothers are likely to have more involvement with work than their counterparts who enter parenthood early, it makes sense that they would cite coworkers as consultants more frequently. However, timing group differences are not retained following the transition to parenthood, when women in all timing groups appear prioritize coworker ties equally.

While early parenthood is associated with lower proportion coworker values among women, it is associated with higher proportion coworker values among men. Thus
the observed association between transition timing and coworker composition among men
is the reverse of the one predicted in Chapter 2 (4A). All else equal, early expectant
fathers cite about 17 percent more coworkers as network alters than their delayed
counterparts (p<.05). Following parenthood, the magnitude of the difference drops
slightly to 14.3 percent, but is still significant (p<.05). In the previous section, regression
results showed that early fathers report lower proportions of friends in their networks
compared to delayed fathers. Together with the current finding, it appears that early
fathers tend to discuss important decisions with coworkers, whereas delayed fathers tend
to consult with friends. This difference may come about as a result of occupational
characteristics, as well as differences in education or class. We have already discussed the
fact that early fathers tend to have lower educational attainment. As a result, they may
tend to work in occupations characterized by less autonomy. Building trades, jobs in the
service sector, assembly line work, and many other occupations requiring little formal
education have established break times and socializing with coworkers is de rigueur. In
contrast, managers tend not to socialize with their supervisees, as Wellman (1985)
observed in his East York Study. Thus, delayed fathers' more advanced occupational
attainment may have produced the timing group differences in coworker composition
observed here.

Gender role ideology, relationship status, and Hispanic ethnicity are also factors
associated with marginally significant differences in the coworker composition of men's
networks. Egalitarian expectant fathers tend to cite more coworkers as network alters
than their counterparts who espouse traditional gender roles, all else equal (p<.10). Since gender role ideology was also a predictor of network gender composition, it could be that egalitarian men are more likely to talk to their female coworkers. Men who value more traditional gender roles, by contrast, might feel that they have less in common with females, and perhaps feel less comfortable working with females (or with females working outside the home at all). In any case, the gender role ideology variable is only marginally significant prior to parenthood, and not significant after it.

Relationship status and Hispanic ethnicity, by contrast, are not significant until after parenthood, when controls for geographic moves are introduced. Around the time of the oldest child's first birthday, Hispanic men cite about 7 percent fewer coworkers in their personal networks than non-Hispanic men, all else equal (p<.10), consistent with prediction 17A. Other studies (e.g., Kim and McHenry 1998) have shown that Hispanics are less likely to be involved in organizations related to their job or occupation than their non-Hispanic counterparts. And as discussed in the previous section, Hispanic men also cite about 13 percent fewer friends than non-Hispanic men. Since kin comprise the vast majority of Hispanic fathers' networks, it appears that other persons, including coworkers and friends, are less favored as consultants for important decisions.

Finally, men who live with a partner extramaritally cite substantially fewer coworkers in their networks than their counterparts who are not in relationships. Assuming a non-Hispanic, early father of average network size and gender role ideology with no geographic moves in the year following the birth of his oldest child, the model
predicts that the network of a man not living with a relationship partner will be comprised of about 21 percent coworkers. In contrast, using the same set of assumptions, the model predicts that the network of a man living with a partner extramaritally would be comprised of only 2 percent coworkers, all else equal (p<.10). It seems likely that men living extramaritally with the mothers of their children would tend to be younger and less established in their careers than those living in other relationship statuses. A man who does not live with the mother of his child, by contrast, would probably tend to have less involvement with kin (both his own, as well as in-laws) and perhaps more involvement with coworkers as a result. Unfortunately, we do not have data on employment status at the time of the child's birth. However, the data confirm that parents in extramarital relationships are significantly younger than those in other groups. In fact, with an average age of only 22.5, it seems plausible that many of these parents might still be in school, and would therefore have little occupational involvement, and fewer coworkers in their networks as a consequence.

*Regressions of the Change in Proportion Coworker*

A final set of regressions on this topic, the change in coworker composition following the transition to parenthood, is displayed in Table 4-18. As indicated in the table, there are particular factors associated with adjustments in the coworker composition of new parents' personal networks. For instance, males with more egalitarian gender role ideology tend to experience significantly greater reductions in the coworker composition of their networks than their less egalitarian counterparts (p<.10). Using the assumption of
an on-time non-Hispanic father with an average initial network size who married without living first with his partner and had no geographic moves, the model predicts that a man who scores relatively low (10) on the gender role ideology index will experience a slight increase in the coworker composition of his network, of just over 2 percent. By contrast, using the same set of assumptions, the model predicts that a man who scores relatively high (18) on the gender role ideology index will experience a nearly 4 percent decrease in the coworker composition of his network. Given that coworkers comprise only about 6 percent of the average male respondent's network, it appears that egalitarian men tend to eliminate the majority of their coworker ties following the transition to parenthood. In this respect, the pattern for egalitarian men is similar to that of women, as implicated by their ideological beliefs.

In addition to gender role ideology, relationship status is also an important predictor of changes in proportion coworker following the transition to parenthood. As shown in both columns of Table 4-18, men and women who live with a spouse or partner tend to deprioritize coworker ties following the transition to parenthood, especially as compared to single parents. However, this seems especially true of married men, and of women living in extramarital relationships. For example, assuming an on-time, non-Hispanic father of average gender role ideology and no geographic moves, the model predicts a 3.3 percent decrease in proportion coworker for a man who married after first living with his partner. His counterpart who never lived with the mother of his child, by contrast, increases his proportion coworker by 6.5 percent (p<.10). Using the same set of
assumptions, the model predicts a small one percent decrease in the proportion coworker of women not married or living with a partner at the time of their oldest child's birth. By contrast, women living with a partner extramaritally at the time of their child's birth experience 8.5 percent decrease in proportion coworker (p<.05). Thus, parents in nearly all relationship status categories reduce their involvement with coworkers following the transition to parenthood. The one major exception to this rule is fathers who do not live with the mother of their child. Due to the presumption of maternal custody, these fathers are no doubt less involved with family and children, so their relationships with coworkers are unlikely to be as affected by parenthood.

To summarize, coworkers comprise less than 10 percent of expectant parents’ social networks. Ties to coworkers are clearly the most expendable of those discussed here, as parents tend to drop a significant portion of coworkers from the list of persons they would consult when making an important decision. Models predicting proportion coworker showed that young fathers tend to name coworkers more often than their counterparts who delay childrearing, whereas young mothers tend to name coworkers less often. For men, gender role ideology is also positively associated with proportion coworker, while Hispanic ethnicity and living with a partner extramaritally are negatively associated with proportion coworker. Finally, models predicting the change in proportion coworker showed that men who espouse more egalitarian gender roles experience greater reductions in proportion coworker than their less egalitarian counterparts, and that single parents of both sexes experience significantly smaller declines in proportion coworker than
their counterparts who are married or living with a partner.

Network Density and the Transition to Parenthood

Network density is a measure of the proportion of actual ties among a respondent's network alters, relative to the number of such ties that are possible. As discussed in Chapter 3, ties between alters were measured by means of a circular diagram upon which respondents were instructed to draw lines linking the names of alters who know each other (see Appendix A). The diagram is a compact and relatively simple way of ascertaining network density. However from the outset it was apparent that it was also the most taxing portion of the survey as it required respondents to transfer a list of names from one page to another, and then to perform the careful thought exercise of who knows whom. To make this portion of the survey as straightforward as possible, I gave special attention to it when administering the survey, and devoted a page within the survey to examples of what a correctly completed diagram would look like. Despite these precautions, some respondents experienced difficulty with this particular component of the survey instrument. While all of the previous analyses in this chapter have used a sample of 113 males and 226 females, the sample size for this section is reduced to 108 males and 213 females. Thus 95.6 percent of males and 94.2 percent of females in this chapter's regular sample are included in the present analyses.

The 4.4 percent of males and 5.8 percent of females for whom information on density is unavailable seem fall into two general categories. Three out of the five omitted men skipped the density diagrams entirely. Some of these men may have found the
instructions too confusing and decided to skip the page rather than risk completing the survey incorrectly. It seems more likely however that this component of the survey simply tried their patiences. It takes a considerable amount of time to read the instructions and examples, and to then transfer a list of names from one page to another. Though willing to volunteer for survey research, a number of the male respondents (and some of the females as well), were apparently unwilling to perform the more strenuous aspects of the task. A second category of persons omitted here completed the survey diagrams, but in a manner which made the validity of the data extremely questionable.⁸

Since females are dropped from the sample at a greater rate than males, the gender composition of the sample becomes slightly more balanced, with the percent female dropping from 66.7 to 65.8. It also appears that Hispanic respondents were slightly less likely to provide complete and full responses on the density items than their non-Hispanic counterparts. Among males, percent Hispanic is reduced from 14.2 in this chapter's main sample to 13.9 in the present group. Similarly among females, percent Hispanic drops from 16.4 in the main sample to 16.0 in the present group. These ethnic group differences in response rates may stem from language barriers. English is not the primary language of

⁸ For example, some respondents drew lines linking all of, but exclusively, the adjacent names on the perimeter of the diagram, resulting in a diagram with a hollow center. When network size is four or larger, a hollow center is easily recognized for its unnatural appearance, as it is clearly in contrast to the more typical patterns of clusters of associates and network isolates. Occasionally a hollow center would be accompanied by the respondent's own words stating, "They all know each other," or something to this effect. With such a message, a flawed diagram could be salvaged, but without it, the case was dropped.
many Hispanic residents of Tucson, and the correct procedure for completing the density diagram was by no means obvious without instruction. It is impossible to know what caused certain respondents' failure to correctly complete the density diagram, but such failures were common enough to warrant particular caution when generalizing the network density results.

Just prior to parenthood, average network density among males was .588, while it was .739 among females. In Chapter 2 I predicted that respondents' networks would tend to become more dense following the transition to parenthood as networks shrink and become more kin-centered. However, we have already shown that only certain groups experience changes in network size and kin composition. Likewise, shifts in network density are not universal. The average density of men's networks remains quite stable at .578, while women's average network density decreases slightly to .704, in contrast to earlier predictions. However, results from regressions show that density varies significantly among different types of parents.

**Regressions of Network Density Just before Parenthood and One Year Later**

A combined sex analysis that tested the main effects of gender and of gender interactions with each of the other dependent variables revealed significant gender interactions \( (F_{9,320}=4.571, p<.001) \). Thus Tables 4-19 and 4-20 display separate sex regressions of network density just before the birth of the oldest child and one year later. Analyses of the change in network density are not reported here, as none of the included variables was predictive of the change.
As shown in the table, network size is the best predictor of men's network density, as larger networks tend to be less dense. In fact, size alone accounts for most of the explained variance in men's network density.

Among females, the only significant substantive effects are related to transition timing. All else equal, the networks of women who start their families early or on-time are significantly more dense than those of their counterparts who delay parenthood until after age 30 (p<.01 for both early and on-time coefficients). Using the timing group-specific predicted values for network size derived from Table 4-3 (early=3.283; on-time=4.302; delayed=4.978) and assuming a non-Hispanic female who was married (without first cohabiting) and had the mean score on the gender role ideology index and no geographic moves, then the model shown in Table 4-19 predicts that 65 percent of the alters in a delayed expectant mother's networks would know each other, whereas 86 percent of the alters would know each other in the network of her counterpart who starts her family early and 82 percent of the alters would know each other in the network of the on-time mother. Thus for women, network density appears to be a function of transition timing, such that younger mothers tend to have the most dense networks and older mothers the least. However, in the year following the transition to parenthood, only on-time mothers are significantly different from their delayed counterparts (p<.01).

The greater network density among on-time mothers is not inconsistent with earlier compositional findings, such as greater kin and female composition among such mothers. All of these are trends in female patterns of associations which have perhaps
been overgeneralized. The linking of these patterns to the normative timing of women's parenthood suggests that they are indeed normative female patterns.

**Summary**

In this chapter I used retrospective data to examine the correlates of, and changes in, a variety of network properties before and after parenthood. The network properties considered here are numerous, as are their correlates, and the results do not readily coalesce into a tidy theme. In order to make the diverse findings more meaningful, this final section will summarize the principle effects of each substantive variable.

*Gender Effects*

Combined sex analyses that tested the effects of gender and of gender interactions with each of the other independent variables revealed significant gender interactions for a majority of the dependent variables considered here. The correlates of men's and women's network properties differ significantly for the following variables: network size, proportion kin, proportion female, proportion coworker, and network density.

The regressions reported here repeatedly revealed distinctly gendered patterns in the effects of substantive variables on the various network properties. For example, transition timing is an important correlate of women's network size and contact frequency, as well as compositional features of women's networks including proportion female and network density. Yet timing plays only a marginal role in the results for men. Similarly, gender role ideology impacts men's network composition in a variety of ways, but makes almost no difference in women's.
In combined sex analyses, gender interactions failed to make significant contributions to models predicting only two of the seven dependent variables considered here, contact volume and proportion friend. Analyses of contact volume revealed significant main effects of gender, while a gender/timing interaction constituted a large and significant portion of the proportion friend analyses. Thus for persons undergoing the life course transition to parenthood, gender is a critically important shaper of the network experience.

**Timing Effects**

Based on the age at which they experienced the transition to parenthood, respondents were placed into one of three transition timing categories: early (under age 21); on-time (between the ages of 21 and 30); and late (over age 30). Besides gender, transition timing is probably the most important of the substantive variables considered here, as it is related to the network properties of both fathers and mothers, and it is associated with the broadest range of network properties including size, contact frequency, and various aspects of composition.

For women, transition timing is an important determinant of network size, contact frequency, and several compositional measures. Both before and after parenthood, early mothers tend to have smaller networks than their counterparts who delay motherhood. On-time mothers also have smaller networks than delayed mothers prior to parenthood, but they experience an increase in network size following parenthood, while delayed mothers experience network shrinkage. Thus post-parenthood network size differences
between on-time and delayed mothers are negligible, while early mothers’ networks remain distinctive for their smaller size. In terms of network size, delayed mothers are advantaged prior to parenthood, but on-time mothers are advantaged after it.

Although they have the smallest networks of the three timing categories, early mothers have more frequent contact with their network alters. Controlling for network size, early expectant mothers talk to their network alters more frequently than their counterparts who delay parenthood. Following the transition to parenthood, early mothers experience a significant reduction in contact with network alters, but even with this reduction, they still contact network alters more frequently than delayed mothers.

Early mothers’ frequent contact with network alters may have something to do with the composition of their networks. Compared to delayed mothers, both early and on-time mothers have more females in their networks, before and after parenthood. Early mothers also have fewer coworkers in their networks than delayed mothers. Prior to parenthood, on-time mothers have more kin in their networks than delayed mothers and also more dense networks. Though timing group differences in kin composition disappear in the year following parenthood (when geographic moves are controlled), on-time mothers continue to demonstrate greater network density throughout the period examined here.

For males, transition timing is also an important predictor of network composition. Compared to delayed fathers, the networks of early and on-time fathers are comprised of fewer friends. Yet among early fathers, coworkers constitute a larger portion of the social
network both before and after parenthood. Thus older fathers appear to prefer friends as consultants when making important decisions, while younger fathers are more likely to turn to coworkers.

Relationship Status

Typically, respondents had a spouse or partner with whom they could share various aspects of the parenting experience. Most respondents were married when they became parents; about half of these had lived with their spouse prior to marriage and half had not. A much smaller category of respondents was living with a partner extramaritally at the time of their child’s birth. Finally, an even smaller category was comprised of respondents not living with either a spouse or partner.

Relationship status is correlated with a variety of fathers’ network properties. Expectant fathers who lived with a partner extramaritally at the time of the birth of their child tend to have smaller networks, comprised of smaller proportions of both females and coworkers. But by the time of the child’s first birthday, these fathers are distinctive only for the smaller proportion of coworkers in their networks. This is one of many instances in which parents’ networks bear greater resemblance to one another after parenthood than before it.

Though network composition is largely stable across the transition to parenthood, relationship status is correlated with two distinct patterns among men. First, some men (especially those in the most traditional relationship status category—those who married without living with their spouse first) become more kin-centered in the year following
parenthood. And second, some men (especially married men who espouse gender
egalitarianism) become less involved with coworkers in the year following parenthood.
Thus married men, perhaps the most family-oriented men in the sample, appear to
experience the most pronounced manifestations of what are generally rather modest shifts
in network composition.

As is the case for men, relationships status is associated with interesting patterns of
network characteristics among women. For example, married women who lived with
their partner first tend to have a smaller proportion of friends in their networks, both
before and after parenthood. Additionally, women in the most traditional relationship
status category (those who live with their spouse only after marriage) tend to have larger
social networks, but less frequent contact with network alters prior to parenthood. By the
time of the oldest child's first birthday, however, these differences are no longer
significant.

Among all of the relationship status categories, however, it is the women who live
with a partner extramaritally who exhibit the most distinctive networks. Initially, their
networks differ from those of women in no relationship only for the fact that they have
more females, all else equal. With the transition to parenthood, however, the networks of
women who live with the father of their child extramaritally experience three kinds of
changes. First, they reduce the frequency with which they talk to network alters. Second,
they drop coworkers from their networks at a faster rate than other women. And third,
the overall density of their networks increases.
In terms of network effects, relationship status is an important modifier of the transition to parenthood experience for both men and women. Though shifts in network properties are subtle, they are usually associated with relationship status. While married fathers become more family-centered and less work-centered (or at least less involved with coworkers), unmarried mothers experience shifts in contact frequency, proportion coworker, and network density.

Hispanic Ethnicity

Compared to non-Hispanics, the networks of Hispanic parents are distinctive in a number of ways. Both before and after parenthood, the networks of Hispanic women are characterized by fewer females, fewer friends, and greater contact frequency. And while women generally experience some network growth with the onset of parenthood, Hispanic women experience pronounced shrinkage. As a result, Hispanic women have significantly smaller networks around the time of their oldest child's first birthday. Hispanic women also have the lowest educational attainment of the groups considered here; the smaller networks of Hispanic women may result from ethnic differences in educational attainment, though these differences alone are not enough to account for the network shrinkage. Cultural patterns with respect to childrearing may help to account for some of these ethnic differences. Additionally, the retrospective data do not contain measures employment status or domestic labor, both of which may influence the amount of time a woman has available for maintaining ties outside the family.

Both before and after parenthood, the networks of Hispanic men are comprised of
more kin and females, as compared to those of their non-Hispanic counterparts. Further analyses revealed that the females in Hispanic men's networks are largely kin. Following the transition to parenthood, the networks of Hispanic men are comprised of fewer friends and coworkers, and greater frequency of contact. Thus Hispanic men are more family centered than their non-Hispanic counterparts prior to parenthood. Following parenthood, this difference is retained and perhaps even enhanced—as expressed in greater network density.

*Gender Role Ideology*

While less important than the other substantive variables considered here, gender role ideology is associated with some distinctive network patterns, especially among men. Both before and after parenthood, the networks of egalitarian men tend to be comprised of more females and to be characterized by greater contact frequency. And while egalitarian men tend to have more coworkers in their networks prior to parenthood, they experience a more pronounced reduction in proportion coworker following parenthood than other groups. For men, gender role ideology is thus an important modifier of the effect of parenthood on network properties.

**Conclusion**

Network properties of expectant parents are correlated with gender, relationship status, ethnicity, and the timing of the transition to parenthood. For men, gender role ideology is also an important factor. But while the transition to parenthood is characterized by a number of interesting shifts in social networks, perhaps the most
important change is the trend toward greater similarity in the network properties among parent of all types. For example, initially large differences in network size among women's transition timing groups were reduced significantly following parenthood, as illustrated in Figure 4-1. With respect to transition timing, most of the differences that were present prior to parenthood (in contact volume as well as women's proportion coworker and network density) became statistically insignificant by the time of the oldest child's first birthday. A similar pattern is clear with respect to the effect of relationship status.

Interestingly, however, the trend toward greater similarity among parents of all types is not universal. Gender role ideology shows its greatest effects only after parenthood commences, and egalitarian men begin to drop their ties to coworkers. And ethnic differences, like those of gender, tend to remain fairly persistent over both the of the periods observed here.
CHAPTER 5: THE SOCIAL NETWORKS OF PARENTS WITH YOUNG CHILDREN

In the previous chapter I used self-reported retrospective data to examine the social networks of parents just prior to the birth of their first child and around the time of that child's first birthday. Evidence generated from this and other studies (see Cutrona 1984; Belsky and Rovine 1984; McCannell 1987) suggests that the year following the onset of parenthood is accompanied by significant network adjustment. However, even as the transition ends, there may be ongoing network effects, particularly as children reach different developmental stages and parents' social lives are altered in response to their concomitant shifts in responsibilities. The purpose of this chapter is therefore to account for the social networks of parents in the subsequent years of intense childrearing.

Cambell (1988) observed that having pre-school aged children impacted women's job-related networks, and Munch, McPherson and Smith-Lovin (1997) reported a variety of network effects associated with having young children as well. But neither of these studies used data gathered specifically for the purpose of examining the life course stage of parenthood, and these data limitations somewhat dilute any claims made about parents' social networks since only a small proportion of respondents in each study were incidentally parents of young children.

In this chapter I will now examine parents' social networks using cross-sectional data, in an analysis closely paralleling that of the previous chapter. However, the analytic approach shifts from retrospective to cross-sectional, and the new data create several new
possibilities. First, because each respondent's youngest child is under the age of eleven, the data permit a broad view of parents' network characteristics that spans the first decade of parenthood, thus encompassing several important developmental stages of children. For instance, very small babies tend to sleep in irregular patterns which may cause sleep deprivation among their caregivers. On the other hand, small babies are quite portable, so parents who have had sufficient sleep can often tote them along to social gatherings. Toddlers, on the other hand, behave inappropriately in most social situations, and many environments are fraught with physical danger for them. Parents of toddlers may find it necessary to use a childcare provider if they want to dine in a restaurant, view a performance, or even visit in someone else's home. Yet while very young children can impede their parents' social lives, the friendships and activities of school-aged children can become the very basis for network ties among adults (see Ishii-Kuntz and Seccombe 1989). Moreover, mothers who left the paid work force during their children's youngest years often return as their children reach school age, a transition that facilitates additional social contexts and contacts outside the home. The ramifications for social networks of parental responsibilities may thus change over time, just as children themselves develop and change.

Because the data are comprised of hundreds of parents with young children, it will also be possible to make comparisons between parents in different demographic categories and structural locations. Gender differences will be discussed, but the data will permit the concept of gender to be entertained in greater depth, bringing marital status, marital
power, gender ideology and actual involvement in the domestic sphere into a more nuanced consideration. Beyond the youngest child's age, I will consider several aspects of family structure, including the impact to parent's networks of additional children, as well as the use of paid childcare. Finally, age, ethnicity, education, and employment status impact the social networks of the general population, and they certainly merit attention in a population of parents as well. As the chapter begins, I examine the impact of these factors on the important property of network size. In a similar fashion, I subsequently consider other network properties including contact volume and various aspects of network composition including proportion kin, proportion female, proportion friend, proportion coworker, proportion neighbor, and network density.

**OLS Regression Models**

I use OLS regression to predict each of the above network properties among parents of young children, in a manner similar to that of the previous chapter. But while the retrospective data were limited to a handful a variables, each of which was included in every model, the scope of available data for the cross-sectional analyses is much wider, and the modeling process is consequently less straightforward. I began with a full model containing every one of the parenting and gender context control variables discussed below as well as each of the demographic controls. While these preliminary models may be alluded to in the text, the regression results I present are reduced models, consisting of the set of basic demographic variables plus controls for those particular aspects of the parenting and gender contexts which were found to be important (statistically significant)
in the full models. The means and standard deviations of all dependent variables used in the analyses are reported in Table 5-1. Table 5-2 reports the means and standard deviations of independent variables.

**Demographic Characteristics and Background Variables**

All regression models control for the following demographic variables: respondent age, education, employment status, ethnicity, marital status, religion, and recent geographic moves. Age is operationalized as the respondent's actual age at the time of the survey, with both linear and quadratic terms, as in previous research (see Marsden 1987; Munch et al. 1997). Each of the other demographic characteristics is operationalized by means of dummy variables. Education is the respondent's educational attainment at the time of the survey, with some form of post-secondary degree or vocational certification coded 1 and high school diploma coded zero. Employment status is the respondent's employment status at the time of the survey. Any form of full- or part-time paid employment is coded 1 and the various other statuses (student, homemaker, retired, disabled, leave of absence, etc.) are coded zero. As in the previous chapter, ethnicity is also coded as a dummy (1=Hispanic, 0=Non-Hispanic). Finally, marital/relationship status is coded zero if the respondent is married or living with a partner, and one otherwise.

Religion is operationalized in the following manner. Respondents checked one of the following categories: Catholic (33%), Jewish (2%), Protestant (32%), None (15%), and Other (18%). Respondents who checked "Other" were requested to write in additional descriptive information. This open-ended category yielded a great variety of
responses, such as Buddhist, Pagan, Agnostic, Hindu, Mormon, born-again Christian, etc. While agnostics and atheists were recoded as "None", other responses were coded as either "Other non-Christian" (3%) or "Other Christian" (12%), the latter being comprised chiefly of Mormons, and people who define themselves as non-Protestant Christians (typically, non-denominational Christians such as Fundamentalists, Evangelicals, and charismatics). While all religious groups could be fairly described as "pro-family", both Mormons and non-denominational Christians belong to churches which seem to foster particularly intense social ties and well-adhered-to beliefs about having and raising children (see Ammerman 1987). As such, "Other Christians" were isolated in a single dummy category, and contrasted to those respondents who had no religion or were from a non-Judeo/Christian tradition. Likewise, all the respondents who checked one of the traditional responses (i.e., Catholic, Jewish, Protestant) were also contrasted to this omitted category.

Finally, a recent geographic move is one which occurred within one year prior to the survey. While nearly 10 percent of the sample experienced a move within the Tucson area, only one percent of the sample moved from outside the Tucson metro area within the last year. Both types of moves are collapsed into one category and contrasted to the omitted category of persons who did not change residences during this period.

Parenting Context

In addition to these background variables, regression models also control for particular aspects of the parenting context which might help to explain variation in parents'
networks. These context variables include: age of the youngest child living with the respondent, total number of children living in the home, use of paid childcare, and hours per day spent taking care of or doing things with children.

Age of youngest child has demonstrated a variety of network effects in previous research (see Munch, McPherson, and Smith-Lovin 1997). If the youngest years of a child's life are the most intense years of parenting, then it would stand to reason that network effects of parenting would be associated with the youngest child's age. Following the earlier study, age of youngest child is operationalized by means of a set of dummy variables, one for each year of age through age six. The omitted category is comprised of those parents whose youngest child is between the ages of six and eleven. The mean age of respondent's youngest child is just over 4 years.

The presence of older children in the home is another factor to consider in predicting parents' social networks. While Munch et al. (1997) found no effect of parity, it is clear that additional children add to the total of parental responsibilities. On the other hand, older children can themselves shoulder some that responsibility by keeping an eye on a younger sibling or helping around the house. Additional children may shift the division of labor among two parents as well; Stewart (1990) reports that parental responsibilities for fathers are enhanced with the arrival of a second child, when mothers tend to direct themselves toward infant care and fathers begin to take a much larger role in the care of the older child(ren) than they had previously. And finally, parity may affect a woman's place in society's division of labor as well. While most mothers with one child remain in
the paid work force, the arrival of a second or subsequent child often precipitates a change in employment status, as income offsets less of the cost and hassle of day care. Entangled as they are, each of these issues might play a role in a parent's social network formation and retention. Thus these analyses control for the total number of the respondent's children (and step-children) living at home.

The care of children is usually shared by some combination of mothers, fathers, other family members, and professional child care providers. The use of paid child care is an important factor to consider, as parents who rely on day care spend less time with their children, and they often use the time they do spend with their children in different ways than their counterparts who use no paid child care. For example, a woman on the double track of employment and motherhood would typically see her young children primarily on evenings and weekends. In order to make up for lost time together during weekdays, she might delay a toddler's bedtime by an hour or more and be reluctant to use a weekend sitter for an occasional adults-only outing. By contrast, the stay-at-home mom might look forward to putting the kids down at night and welcome an occasional weekend away from home. Of course, these two lifestyles may produce different patterns of association; the first mother builds and maintains social ties during the week at work, while the second meets people primarily through a variety of kid-friendly contexts, or else through evening and weekend activities. No single factor encapsulates the totality of this lifestyle difference, but the use of paid child care is certainly one of its indicators. Regression models thus include a dummy variable to control for whether or not paid child care is used
Finally, any of parenthood's network effects may depend on how much time a parent actually devotes to the job of being a mother or father. Irrespective of the use of paid child care, some parents may spend more time with their children than others. For instance, a father who is a medical resident may work such long hours that time spent with children is an irregular occurrence. By contrast, some fathers have flexible schedules, allowing them to work a few hours in the evening in order to coach the soccer or t-ball team for a few hours during the day. Even controlling for the share of child care that is provided by professionals, a parent's social contacts will be shaped by their degree of involvement with children. The survey asks: "On average, about how many hours do you spend taking care of or doing things with children? On days when you're working outside the home? On days when you're not working outside the home?" I used the maximum of these two as an indicator of the respondent's involvement in the domestic sphere of children and child care. Most respondents spend more time with children on days when

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9 I considered other operationalizations of this variable, including the minimum of the two measures, the average, and a weighted average based upon a composition of working and non-working days. However, respondents' employment schedules are not available in these data, so a composition would be based on an assumed employment schedule (such as 5 X the number of hours on a typical working day + 2 X the number of hours on a typical non-working day). Such an assumption would work reasonably well for the majority of men in the sample, but part-time workers constitute nearly one quarter of the female sample and applying the assumed full-time employment schedule to part-time workers is problematic. Another possibility would be to use different compositions for full- and part-time workers (such as assuming a 5 day work week for full-time employees and a 2.5 day work week for part-time employees). While not without its problems, this approach would be more valid. However, in this initial series of analyses, I finally elected
they are not working than on days when they are working, perhaps typically on weekends. Even on days when they are not working, men report spending significantly less time (p<.001) taking care of or doing things with children than women do (6.9 hours on a typical non-working day for men and 9.4 hours per day on a typical non-working day for women).

While caring for children is perhaps the most important of the activities occurring in the domestic sphere, it is certainly not the only one; other activities such as cooking, cleaning, and paying the bills are essential in households. The manner in which these other tasks are distributed by sex is an aspect of a respondent's gender context which may also have ramifications for social networks in the early years of parenting. Respondents who shoulder many responsibilities in the domestic sphere may simply have less time to consult with network alters, while those who bear less responsibility at home (either because they have a spouse or partner who takes care of home chores or because they pay for some form of professional help) have more time available for other activities, including making and retaining social contacts. The survey asks: "On average, about how much time do you spend on home chores--things like cooking, cleaning, repairs, shopping, yardwork, and keeping track of money and bills? On days when you're working outside the home? On days when you're not working outside the home?" I used the maximum of these two as an indicator of daily hours per day spent with children. In any case, the correlation between this operationalization and one based on a composite of working and non-working days is quite high (.81) and results using different measures are substantively similar.
indicator of the respondent's involvement in the domestic sphere of home chores (the
discussion in the previous footnote applies here as well).

Respondents' options with respect to both domestic responsibilities and network
affiliations may also be shaped by their level of power in the household. Parents with
relatively high levels of household power may enjoy more freedom to associate with
network alters, while those with relatively lesser household power may be restricted in the
time, manner, place, and participants of their network association. Following Huber and
Spitze (1983), the survey asks: "Who decides: Where to go on Vacation? What house or
apartment to live in? Whether to move to another city? What major purchases to make,
like buying furniture or a car?" Each type of decision is assigned a numerical value in the
following manner: "spouse" or "someone else"=-1; "both of us"=0; "self" or "not
applicable"=1.\textsuperscript{10} These values are summed to yield an index of household power which
can theoretically range from -4 to 4, with higher numbers signifying greater power in the
household. In these data, values on the index range from -3 to 3 with a mean of .46.
Respondents who were single at the time of the survey did not complete this section of the
questionnaire, and were automatically assigned the maximum value of household power.
Because women are more often single heads of households, mean household power is
actually higher among women than among men.

\textsuperscript{10} The data used by Huber and Spitz (1983) were drawn from a survey of married
persons, and the variable was called "perception of marital decision making". The
household power variable described here was modified slightly in presentation and coding
to accommodate a variety of relationship statuses.
Due to circumstances beyond their control, respondents' actual involvement in the domestic spheres of child care and home chores may be at odds with their beliefs about how that involvement ought to be distributed among the sexes. A gender role ideology index was created by summing the Likert-type responses to four statements: "It is much better for everyone if the man earns the main living and the woman takes care of the home". "Preschool children are likely to suffer if their mother is employed", "Parents should encourage just as much independence in their daughters as in their sons", and "In a successful marriage, the partners must have the freedom to do what they want individually". The first and second statements were reverse-coded, and the responses summed to yield a scale which could range from 4 to 20, with higher numbers signifying greater egalitarianism in gender roles. Scores on this index ranged from 8 to 20, with a mean of 14.8. Analyses with other variations of a gender role ideology index do not change the substantive results.

To summarize, in the process of examining parents' social networks I considered a great variety of factors including family form, involvement in the domestic sphere, and role preferences. Starting with a handful of basic demographic variables, the general strategy was to see which of the many particular factors outlined above was predictive of parents' network properties. Net of demographic controls, regression results reported here control for only those factors which were found to significantly impact parents' networks. However, because gender comparisons are such an important aspect of the analyses, parallel models are presented for men and women, even when the factors predictive of
men's and women's networks differ substantially.

Network Size among Parents of Young Children

Compared with the two retrospective periods, reported network size among parents was largest at the present time. While reported network size averaged 4.12 prior to parenthood and 4.05 after it, the average network size in the present-time cross-sectional component of the data was 4.41. Thus, parents report significantly larger social networks as their children grow, compared to the time just before parenthood (p<.05) as well as one year later (p<.001). (These results are based on paired t-tests, which accommodate the non-independence resulting from repeated observations on the same subjects.)

However, as was the case in the previous chapter, the pattern of network change is more pronounced for women than for men. The average male in the study enters parenthood with 3.74 alters in his social network, and loses 0.15 of those alters over the course of his oldest child's first year. At the time of the survey, that same average male has a 4 year-old youngest child, and a social network comprised of 3.8 alters. Based upon these three "snapshots" showing a net gain of 0.06 alters, it appears that men's networks are relatively stable with respect to the early years of parenting. Women's networks, by contrast, appear to be slightly more dynamic. Just prior to parenthood the average female in the study had 4.42 network alters, all but 0.13 of whom she retained in the following year. At the time of survey, the average female had a 4 1/2 year-old child and social network comprised of 4.71 alters. The three "snapshots" of mothers show a net gain of
.29 alters, which is about five times greater than the change experienced by fathers and is a significant increase (p<.001) from pre-birth network size. Thus we have some indication that both fathers and mothers tend to experience network shrinkage within the first year of parenting, and that both fathers and mothers tend to experience a recovery in terms of network size, but we don't yet know when that recovery occurs, or what factors mediate in it.

In order to explore these issues, I performed regressions of network size using a variety of model specifications. For example, since earlier research (Munch et al. 1997) highlighted the importance of age of youngest child, I was particularly interested in gauging the effect of the set of dummy variables for age of youngest child. I compared a reduced model containing only the set of demographic variables to a full model containing both the demographic variables and the set of seven dummy variables for age of youngest child, and found that the gain in explained variance was not significant, though a few individual coefficients for age of youngest child were occasionally significant. Thus, the results are inconsistent with the prediction (12C) that age of youngest child is a correlate of parents' network size.

From the many estimated model specifications, a final separate-sex model predicting network size is reported in Table 5-3. A combined sex analysis that tested the main effect of gender and of gender interactions with each of the variables included in this model revealed a number of significant gender interactions (F_{12, 308}=1.704, p<.10), thus separate sex models are presented in the interest of parsimony. As shown in the table, this
model controls for basic demographic characteristics, the most important of which are education, age, and religion. Consistent with earlier findings, the size of mothers' networks is positively correlated with education ($p<.01$). Net of other effects, having a college degree or vocational certification is associated with an increase in network size of 1.267 alters. In fact, education is the single-most important factor in models predicting women's network size. This is hardly surprising; studies have consistently proposed a link between education and the size of an individual's social universe. Bott (1957), for example, noted a tendency among working class women to restrict their social associations to those with persons residing within the same neighborhood, while their more educated counterparts were pulled into a larger variety of social contexts through friendships, employment, memberships, and volunteer work. More recently, similar education effects were observed in Fischer's NCCS (1982), who noted that education was the most influential predictor of network structure. Marsden's (1987) analysis of General Social Survey data also uncovers a similar finding.

Among the demographic variables, religion also plays a significant role. Affiliation with a traditional religion (Catholic, Jewish, or Protestant) is positively associated with men's network size ($p<.05$). All else equal, men who claim adherence to one of these faiths tend to name 1.629 more decision consultants than their counterparts with no religious affiliation. This correlation could result from the disproportionate tendency for adherents to traditional religions to name priests, rabbis, and pastors as potential decision consultants. Obviously, men who claim no religious affiliation would be unlikely to
consult with such persons. Moreover, such men do not generate and retain network ties through weekly services, which could be a source of friendships with similar others. Additionally, it is possible that both religious affiliation and larger networks come about as a result of an unmeasured disposition toward social interaction.

Net of the demographic characteristics, two aspects of the parenting context are also important. Chief among these is the number of children living at home, which is positively related to network size among mothers (p<.05) but not fathers, a result which supports the gender hypothesis that any effects of children are more pronounced among women. Using the assumption of a statistically average woman who is 34 years old, married, college educated, employed, Catholic, non-Hispanic, geographically stable and spending time with children 9 hours per day (probably on weekends or days off from part-time work) the model predicts that a mother with one child will have a network size of 4.83 whereas a mother of four will have a network size of 6.01. In terms of network size, parity does not restrict a mother's social world, but rather enhances it. The woman with many children may be perpetually barefoot, pregnant, and doing laundry, but she apparently is not lacking in social interaction.

In one sense this result seems almost counter-intuitive, since above-replacement-level fertility has demographic associations with the Third World, poverty, and restricted roles for women--images which don't seem to equate with the abundance of social resources offered by large networks. But on the other hand, while sociologists, economists, and environmental scientists often discuss the resources consumed by "the
average American family", they rarely study families on the extremes, such as those raising four or more children. Perhaps it doesn't take an entire village, but the complexities involved in raising a large family would certainly seem to foster ties among persons who could offer social support and assistance.

For example, let us imagine a hypothetical mother with three children, two of them school age. One day each week, the older kids have to be two different places at the same time. a music lesson and a soccer practice. The resourceful mother makes her life easier by developing a friendship with another parent who's transporting a child to soccer practice. Her new friend eases the transportation dilemma, but there's still the problem of the youngest child, who takes an afternoon nap. She makes a quick call to her elderly neighbor, who is delighted to come over and do some knitting for an hour or so while listening for the baby. The mother of three thus requires more social resources and gets by only with a little help from her friends, while the mother of a single child can usually get by on her own. As these relationships are continually activated, the importance of the ties may expand, even to the point of being decision consultants. Children may thus be the impetus and rationale for a significant portion of women's networks.

Beyond the number of children in the home, we note that fathers' networks are influenced (p<.10) by the number of hours they spend taking care of or doing things with children. Net of other factors, each hour spent with children reduces a dad's networks by about one-sixth of an alter. Assuming a statistically average father with two children at home (37 years old, married, employed, college educated, non-Hispanic, Protestant, and
geographically stable) the model predicts that a father who spends about an hour per day with children will consult with 5.06 alters, while the father who spends the average of 7 hours per day with children will consult 4.10 and the father who puts in a full 16 hour day with his kids will consult only 2.66. This finding supports prediction 5B that heavy involvement in multiple spheres reduces the time and energy available for fostering and retaining network ties. A few occasions might include both a dad's network alters and his children (for example, getting together with another dad to take the kids to a football game, or bring-your-daughter-to-work day) but such events are rare among fathers. Instead, children and network alters generally stand in competition for the scarce resources of a father's time and energy.

To summarize, the regressions of network size have yielded some interesting findings. As in previous studies, educational attainment has a substantial impact on network size, though only among women. Religious affiliation within a traditional Catholic, Protestant, or Jewish orientation is also associated with larger networks among men. But most interesting for the purposes of this study is the finding that the context of childrearing shapes the size of a parent's social networks. Two structural factors emerge as particularly important: the number of children at home and the daily number of hours spent with children. The demands of additional children seem to propel their primary caretakers (mothers) to rely on additional social resources. For fathers, who spend most of their time with children on weekends, hours spent with kids reduce time available for other network associates. A more complete picture of these trends will emerge as we
Contact Frequency among Parents of Young Children

As described in the previous chapter, contact volume is a measure describing the number of annual contacts in a respondent's ego network. Respondents were asked to indicate how often they usually talked to each alter. The possible responses were assigned a numerical value in the following manner: "almost every day"=365; "at least once a week"=52; "at least once a month"=12; and "less than once a month"=6. Contact volume is the sum of these values for each of the respondent's alters. The theoretical range of the contact volume measure is from 0 to 5,840 (16x365), but the actual range in these data is substantially narrower, from 0 to 2,607.

Compared with the two retrospective periods, parents' contact volume was largest at the present time, mirroring the contraction-and-recovery pattern of network size. Prior to parenthood, women average 774.46 annual contacts. They lose an average of 25.53 annual contacts in the year following parenthood, but by the time of the survey, their annual contacts average 782.00. The net gain in women's contact volume at the time of the survey averages 7.54. Among men, the pattern is similar. Men average 453.26

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11 Measurement error may also play a role in the apparent fluctuations in contact volume, as respondents could experience difficulty remembering the frequency with which they had contact with alters in prior years. If so, then we might expect that memory decay and other saliency issues would be greatest for the initial measurement period, when the recall period is longest. However, it is also possible that memory decay would be greatest during the period of greatest change and adjustment, which might account for lower contact volumes in the second measurement period, around the time of the oldest child's first birthday.
annual contacts with alters prior to parenthood, retaining all but 9.36 annual contacts in the following year. By the time of the survey, men's annual contacts have recovered to 494.55, for a substantial net gain of 41.29.

While we would certainly not expect frequency of contact with associates to remain static, the observed pattern does defy certain expectations. The substantial gain in annual contacts with network alters among fathers, in particular, is surprising in light of the fact that their network size is so stable across the same period. And while mothers' network size has increased significantly, frequency of contact among women is actually fairly stable. I performed regressions of contact volume to better understand these and other patterns. The modelling strategy was the same as in the previous section on network size; a full model containing all of the demographic and parenting context variables was reduced to the set of demographic variables and only those parenting context variables with significant net effects. In addition, the models predicting contact volume also controlled for network size. Regressions resulting from this process are reported in Table 5-4, which displays the results of separate-sex regressions. A combined analysis that tested the main effect of gender and the interaction effects of gender with each of the other variables included here revealed significant gender interactions ($F_{12, 308} = 2.878, p<.001$).

As anticipated, network size is positively and strongly correlated with contact volume in models for both men and women. In fact, 39.91 percent of the variance in men's contact volume is accounted for by network size alone, while 31.23 percent of
women's is. But beyond this similarity, the models for men and women bear little resemblance to one another. As a comparison of the two columns in Table 5-4 will show, more variance is explained in the model for men ($R^2 = .524$) than in the model for women ($R^2 = .422$), despite the fact none of the other regression coefficients in the men's model is statistically significant and the sample size is smaller. However, several factors are marginally significant predictors of fathers' contact volume, including age ($p < .10$), and Hispanic ethnicity ($p < .10$).

Net of network size and the other variables, men's contact volume tends to fluctuate with age. The range of respondent ages considered here is narrower than one would find in a sample of the general population, but the association between age and network integration is similar to that reported in other studies (e.g., Marsden 1987), with annual contacts highest in the early-middle years, until about age 36, and decreasing gradually thereafter.

Frequency of contact with network members is also related to ethnicity, with Hispanic men having 158 more annual contacts than their non-Hispanic counterparts, all else equal. This is consistent with the previous chapter's retrospective analysis, which showed that Hispanic men and women have greater frequency of contact with network alters, both before and after parenthood. Subsequent analyses revealed several ethnic differences in network composition which are likely to account for the disparity observed here.

Among women, Hispanic ethnicity is the most important of the demographic
factors considered, with Hispanic mothers reporting 301 more annual contacts than their non-Hispanic counterparts ($p<.001$), net of other factors. Also marginally significant are the coefficients for employment status ($p<.10$) and recent geographic move ($p<.10$). Women who moved within the year prior to the survey report 177 fewer annual contacts, ceteris paribus, while employed women report 136 more annual contacts than their counterparts who are not involved in the world of paid work. Both of these findings make intuitive sense; daily contact with coworkers is possible only to the extent that one is employed, while new ties to neighbors and friends take time to build. The network composition analyses will no doubt enhance our understanding of these results.

For the purposes of this study, the most interesting finding of the regressions of contact volume is that use of paid child care is negatively associated with the number of women's annual contacts with network alters ($p<.05$). All else equal, women using a professional childcare provider have about 141 fewer annual contacts than their counterparts who don't use such a service. Net of employment status and the other factors, it appears that child care arrangements seem to matter for women's networks: and women whose children are watched on a voluntary basis by spouses, other relatives, or neighbors have more network contacts, while women using paid care have less. Thus the boost to annual contacts which is associated with paid work is erased by an even slightly greater decline associated with the use of paid child care.

In Wellman's (1985) study of East York, the 'double loaders' were women who worked at paid employment, but were responsible for most or all of the domestic work at
home as well. Double loaders are in a peculiar structural location, according to Wellman; their paid jobs allow them access to social circles outside the confines of family and neighborhood, while their domestic work limits the time they have to develop personal ties in other spheres. They rarely socialize after working hours, and neither do they keep ties with other women in the neighborhood. Together, the employment status and paid child care findings reported here appear to support Wellman's argument, and the predictions made in Chapter 2 (5B).

The majority of women in the sample engage in paid work, but only 56 percent do so on a full-time basis. 23 percent work for pay part-time, while 21 percent do not work for pay. Because the burden of the double load might vary as function of a mother's involvement in paid work, I performed additional regressions that distinguished between full- and part-time employment.\textsuperscript{12} Results of these regressions are reported in Table 5-5. As indicated in the table, the annual contacts of women employed on a full-time basis exceed those of non-employed women by 168 (p<.05). The coefficient for part-timers is also positive, but not significant. Thus, women's employment is associated with a boost in contact volume, but only if that employment is full-time. In this model, the coefficient for paid childcare has increased in magnitude to 147. Thus the gains to women's contact volume associated with full-time employment offset the losses associated with paid childcare by about 22 annual contacts. Assuming an average woman (married, 34-years-

\textsuperscript{12} Due to issues of multicolinearity, I could not distinguish between employment types in all analyses. It was possible in this case, however.
old, geographically stable, Catholic and non-Hispanic with average network size) the model predicts the following contact volumes: employed full-time and using paid child care=749; employed part-time and using paid child care=641; non-employed and not using paid care=728.

Regressions of mean contact frequency or the average number of annual contacts per alter lend further support to the idea that the double load, the use of paid child care and network integration, are interrelated. A combined sex analysis of this related variable also yielded significant gender interactions ($F_{12,308}=2.712$, $p<.01$), so separate sex regressions are reported in Table 5-6. As indicated in the table, use of paid child care is the only factor at all predictive of mean contact frequency among men ($p<.10$). The statistically average man (38 years of age, married, employed, non-Hispanic, Protestant, geographically stable, and with average network size) who uses paid child care averages 160 contacts per alter annually, while his counterpart who uses no paid care averages 117. In this case, it seems likely that use of paid child care is acting as a proxy for wife's employment status. A man whose children have paid care typically has a spouse or partner who also works outside the home. At the end of the working day, he has a fair amount of discretion over his time, with the children are now in the care of a double-loading mother. By contrast, the man whose children have no paid care has more domestic responsibilities and consequently less time available at the end of the day for

\[13\] Consistent with the double load account, the coefficient for paid child care use in the model for women is negative. However, it is not significant ($p=.16$).
activities outside the domestic sphere, consistent with prediction 5B.

In order to investigate the possibility that a father's frequency of contact with alters depends upon his spouse or partner's employment status, I performed additional analyses with a control for spouse's employment status added to the model reported in Table 5-6. When this control is introduced, the coefficient for paid child care is no longer significant, but the coefficient for spouse's employment status is positive and significant (p<.05). All else equal, fathers whose spouses or partners are employed report about 58 more annual contacts with each of their network alters.

Taken together, the findings pertaining to contact frequency provide support for the idea presented in Chapter 2 that professional child care is an important means by which gender differences in patterns of association can be lessened. Paid child care use is associated with reduced contact volume among women, but heightened mean contact frequency of men. Thus when paid child care is used, men's and women's patterns of association with respect to contact frequency become more similar. However, these findings also suggest that the greater gender equity in contact frequency that is associated with women's employment and paid child care use comes about only as a result of the gender inequity in the distribution of domestic work during the "second shift". Gender equity in the form of restrictions on women's social interactions hardly represents progress.

Network Composition among Parents of Young Children

In this section I examine several compositional features of parents' social networks.
including proportion kin, proportion female, proportion friend, proportion coworker, proportion neighbor, and network density.

Proportion Kin

As in the previous chapter, kin comprise the majority of parents' network associates. Compared with the time just before the birth of the first child, kin composition is significantly lower at the present time. Prior to parenthood, the proportions of kin comprising men's and women's networks were statistically indistinguishable from one another at .636 and .702 respectively. The cross-sectional data yield a similar non-significant gap in men's and women's proportion kin, but a lower overall proportion for both genders at .606 and .659. Compared with the time surrounding first parenthood, father's and mother's networks appear become less kin-centered as their children age.

A combined-sex regression analysis of proportion kin that tested the main effects of gender and of gender interactions with all of the demographic variables and with network size revealed significant gender interactions ($F_{11, 310} = 2.139, p<.05$). Separate-sex regressions of proportion kin are therefore reported in Table 6-7 (note that the table is 2 pages long). Among the demographic variables, only single relationship status is strongly correlated with proportion kin, and only for women ($p<.001$). Since in-law relationships are an important source of kin ties, it makes sense that single women would have networks comprised of fewer of those ties. In this case, being a single mom is associated with a 17% reduction in kin ties, ceteris paribus.

The model reported in Table 5-7 uses dummy variables to control for age of
youngest child. The dummies constitute a significant improvement in the model predicting women's proportion kin (F_{7,205} = 2.43, p<.05). For the sake of consistency, I report a parallel model for men, though the age of youngest child dummies are not a significant contribution in the men's model. Previous research (see Munch et al. 1997) reported a link between age of youngest child and the composition of men's networks, but not women's; the present finding reverses the story, with children's age affecting women's network composition, but not men's. Unfortunately, the exact nature of the relationship between the age of youngest child and kin composition is not readily apparent. Two age categories are associated with compositional differences from the omitted category of youngest children over age seven: 2-3 year olds, and 5-6 year olds. Compared to women with older youngest children, women with children of these ages tend to have lower kin composition. This compositional effect is generally consistent with prediction 13B. Unfortunately, it is difficult to account for the distinctiveness of these particular age categories.

The left-hand column reporting the results for males is, by contrast, more readily interpretable. Males with young children tend to report greater kin composition in their networks, compared to their counterparts with slightly older children. However, only fathers of infants are significantly distinct, reporting 23% more kin in their networks (p<.10) than fathers of school aged children, all else equal. Fundamentally a family event, a newborn's arrival tends to stimulate communication between relatives, and may particularly enhance a father's ties to his own parents, as well as his in-laws, so it is not
surprising that infant's fathers would be more kin-centered.

What is surprising in the fact that no other variables in this model are predictive of kin composition. When the age of youngest child dummies are omitted from the model, the coefficients for ethnicity (p<.05) and single relationship status (p<.10) are significant, but both of these effects disappear when age of youngest child is included. In the retrospective data, Hispanic ethnicity was the single most important predictor of men's kin composition, both before and after first-time parenthood. Since this effect was so pronounced in the retrospective data (p<.01) and was retained in the cross-sectional data, it is surprising that it is not robust.

To briefly summarize, age of youngest child is associated with the kin composition of fathers' and mothers' networks, but the nature of the relationship between these two variables is somewhat complicated. The set of age of youngest child dummies constitute a significant improvement to the women's model, though only two of those dummy categories are significantly distinct from the omitted category. The two categories (mothers whose youngest child is 2-3 or 5-6) are non-adjacent; an account of this peculiar finding would have to be purely speculative. In the men's model, the relationship between age of youngest child and kin composition seems much more straightforward, with fathers of infants having the greatest involvement with kin. Fewer dummy categories would no doubt have strengthened the relationship, but as it stands, the set of age of youngest child dummies does not constitute a significant improvement to the model for men, though it does suppress the previously strong association between men's kin composition and
Hispanic ethnicity.

Proportion Female

Females constitute 52% of men's network associates and 56% of women's network associates. These values are closer to the post-birth values than to the pre-birth values from the retrospective data, and are significantly different from both of them (p<.05 for a paired t-test of the difference between post-birth and cross-sectional measurement periods in the full sample).

Because combined sex analyses assessing the main effect of gender and of interactions of gender with the other independent variables revealed significant gender interactions (F_{12,306}=2.255, p<.01), separate sex analyses were performed. These analyses (not reported here) suggested that the use of paid child care is positively associated with the sex composition of men's networks. However, the association is present only when age of youngest child controls are included. But the age of youngest child controls, in and of themselves, do not constitute a significant improvement to the model, so their inclusion is difficult to justify. In the fully reduced model (controlling for network size, demographic factors, and use of paid child care) only employment status is a marginally significant (p<.10) predictor of men's sex composition, and only age is predictive of women's sex composition (p<.10 and p<.05 for linear and quadratic terms, respectively). The focus and nadir of the predicted age curve for women's sex composition is 33.58 years.
Proportion Friend

While men identify 17% of their network associates as friends, women's friendship composition is significantly higher at 25%. These values are comparable to those obtained from the two retrospective measurement periods, with men's slightly lower and women's significantly higher (p<.01) at the present time. Unlike previous measures, there are no significant gender interactions in models predicting proportion friend, so a combined sex model is presented in Table 5-8.

As indicated in the table, the main effect of gender is significant, but only marginally so (p<.10), indicating that all else equal, women tend to have about 6% more friends in their networks than men do. With the exception of the control for network size, the strongest association in the model is that between proportion friend and hours spent doing home chores. All else equal, each daily hour spent doing home chores is associated with a 1.2% reduction in proportion friend (p<.01) such that an average respondent (female, married, age 35, college educated, non-Hispanic, Catholic, employed, and geographically-stable with a network size of 4.413) who spends a typical amount of time doing chores (about 5.5 hours) will have networks comprised of 26.6% friends. The model predicts that the same average respondent who does only two hours of chores will have a network comprised of 31% friends, while she who does a full day of chores (8 hours) will have a network comprised of only 23.5% friends. In Chapter 2 I predicted (7B) that parents who specialize in a sphere (either domestic or economic) would have lower friendship composition, due to time constraints. In contrast, these results suggest
that greater involvement in the domestic sphere is systematically linked with lower friendship composition.

In addition to this indicator of domestic responsibilities, several of the demographic variables are also predictive of proportion friend. The coefficient with the greatest magnitude, for example, is that for single relationship status. All else equal, single persons have networks comprised of about nine percent more friends than their counterparts who are either married or living with a partner (p<.05), consistent with prediction 14A. This is hardly surprising, since we know that singles tend to have lower kin composition in their networks--about 17% less according to the model reported in Table 5-7. If singles' networks are comprised of fewer kin ties, then their ties must be comprised of more non-kin ties, including those to friends and coworkers. Conversely, Hispanics tend to report about 9% fewer friendship ties in their networks than their non-Hispanic counterparts, all else equal (p<.05), consistent with prediction 16A. We know from the retrospective analysis, as well as from preliminary analyses in the cross-sectional data, that Hispanics (particularly Hispanic males) tend to report more kinship ties in networks, and this greater kinship composition is achieved at the cost of other non-kin ties.

Proportion Coworker

Coworkers constitute a small but important segment of respondents' network associates. Women's networks are comprised of an average of 3.9 percent coworkers, while men's are 6.2 percent coworkers. Each of these proportions is lower than its pre-
birth equivalent, when women's and men's networks were comprised of 6.1 percent and 7.6 percent coworkers, respectively. Women and men report that in the year following the birth of their first child, their networks are comprised of 3.3 percent and 6.0 percent coworkers respectively, so the cross-sectional data bear greater similarity to the post-birth than pre-birth data, with respect to coworker composition. It appears that parenthood may be accompanied by a fundamental shift in coworker relations. A return of networks to their pre-parenthood state may not occur, or if it does occur, the time it takes may be longer than the period considered here.

Using the same analysis strategy as elsewhere in this chapter, I ran full regression models containing each of the demographic and parenting context variables. In these full models, three parenting context variables were significant: the number of children living at home, the maximum daily hours spent working on home chores, and gender role ideology. The reduced model presented here consists of the demographic variables, these three parenting context variables, and a control for network size. A combined sex analysis of the main effects of gender and of gender interactions with each of the other variables in the model revealed significant gender interactions ($F_{14,304}=2.104$, $p<.05$). Thus separate sex regressions are presented in Table 5-9.

The single factor most predictive of men's coworker composition is daily hours spent doing chores at home. All else equal, each hour spent doing chores reduces the coworker composition of a man's network by about 0.9% ($p<.05$). This finding is consistent with prediction 8B. Given that coworkers comprise only about 6 percent of
men's networks, the impact of this association is substantial. For example, let us return to the assumption of an average male respondent—married with two kids, employed, college educated, 37 years of age, non-Hispanic, Protestant, and geographically stable with a score of 14.3 on the gender role ideology index and a network size of 3.8. The model predicts that if such a man were to have average involvement in household chores (about 5 hours' worth on a typical day off from work), then the proportion of coworkers in his network would be .076. On the other hand, if the same man does little in the way of home chores (two hours) then the model predicts his networks would be comprised of .104 coworkers. Finally, the man who spends quite a bit of his time doing home chores (eight hours) is predicted to have networks comprised of only .047 coworkers. Thus, in terms of coworker composition, the networks of men who have substantial involvement in the domestic sphere are more similar to the average female than they are to the average male, supporting the idea that gender itself is a product of patterned relationships (see Smith-Lovin and McPherson 1993).

In earlier analyses, I reported a similar relationship between men's network size and the number of hours they spend taking care of or doing things with children. The association suggests that children and network associates are in competition for time and energy, scarce resources among fathers of young children. The analysis of coworker composition adds to the support for the resource competition hypothesis, as men's greater involvement in the domestic sphere is associated with a distinctive pattern of network composition which prioritizes ties to coworkers less.
Beyond the degree of domestic involvement, several of the demographic controls are strongly associated with coworker composition as well. Claiming a traditional Protestant, Catholic, or Jewish religion, for example, is negatively associated with coworker composition among women \( (p<.01) \), while claiming an "other Christian" religious affiliation is positively associated with coworker composition among men \( (p<.05) \). Compared to women with no religious affiliation, women in the "traditional" religion category name an average of 6% fewer coworkers as decision consultants, all else equal. In both magnitude and statistical significance, this is the strongest effect from the women's analysis. Consistent with their traditional religious orientation, the women in this category might be traditional in their choice of confidants as well, preferring to discuss important decisions with spouses, family members, and perhaps clergy or trusted friends. Their religious affiliation emphasizes the importance of faith and family over careers, as well as group ritual over individual soul-baring. These tendencies may lead them to downplay coworkers as important decision consultants.

Men with an "other Christian" religious affiliation, by contrast, have a matter of great importance to discuss with their regular associates (including coworkers) and that is the matter of salvation (see Ammerman 1987). Evangelical Christians are called to openly share the story of their own salvation as they seek to save others, in the process of witnessing. Moreover, gender roles among "other Christians" are particularly segregated, with the role responsibilities of breadwinner and spiritual head of their household particularly emphasized for male adherents. The importance of the breadwinning role may
lead these men toward involvement with coworkers that is greater than that evidenced among their non-religious counterparts. Both of these factors—the call to witnessing as well as breadwinning as a sacred male responsibility—may work together to emphasize a unique pattern of association among this group of Christians, resulting in networks comprised of nearly 10% more coworkers than among either of the other religion categories.

As in the retrospective analysis, there are ethnic differences in coworker composition as well, with Hispanic males having an average of 6.7% fewer coworkers in their networks than their non-Hispanic counterparts (p<.10), and Hispanic females having networks comprised of an average of 5% more coworkers in their networks than their non-Hispanic counterparts (p<.05), all else equal. This result is consistent with the retrospective analyses presented in the previous chapter. The networks of Hispanic males are comprised mostly of kin, to the exclusion of other kinds of ties, including coworker ties. Hispanic women were found to have very high contact frequency as well as sex heterogeneity in their networks, though not exceptionally high kin composition. The prioritization of coworkers as decision consultants by Hispanic women might help to account for these earlier findings.

Finally, note that for women, the number of children living at home is negatively related to proportion coworker (p<.10). Each additional child is associated with a one percent reduction in proportion coworker, all else equal, such that a statistically average woman with two children (married, age 34, non-Hispanic, Catholic, employed, and college
educated, with a network size of 4.713, a gender role ideology score of 15.242, and 5.738 hours' worth of home chores) will have networks comprised of just over 2 percent coworkers, while her counterpart with four children will have networks comprised zero coworkers, all else equal. Earlier, I discussed the positive relationship between number of children and women's network size as attributable to the resource requirements of large family size. Similarly, because a woman's coworkers may have no particular interest in her children, and may not even know them, they are not in a good position to act as resources for a woman trying to meet the demands of family life. Since coworker ties are not particularly useful or rewarding for a woman with a larger-than-average family, they are less likely to be used as decision consultants.

To summarize, coworker ties comprise a small but socially significant portion of respondents' networks. For parents of young children, the responsibilities associated with the domestic sphere are particularly intense; coworker composition appears to be inversely related to those responsibilities. Among men, coworker composition is a decreasing function of hours spent working on home chores, while among women, coworker composition is a decreasing function of the number of children in the home. Though the models reported here controlled for a variety of potentially mediating factors, it is curious to note that employment status is not predictive of coworker composition among either men or women.

Proportion Neighbor

Neighbors comprise only a small portion of the average respondent's network
associates, but neighbor composition is indicative of a structural location that emphasizes the domestic sphere. Therefore, compositional analyses include proportion neighbor.

While men identify only .74 percent of their network associates as neighbors, women's neighbor composition is somewhat higher at just over 1 percent. There are no significant gender interactions in models predicting proportion neighbor, so a combined sex model is presented in Table 5-10.

As indicated in the table, the main effect of gender is not significant. Among the demographic controls, only age is significant (p<.05 for both the linear and quadratic terms). The focus of the estimated age curve is 35.99 years, with neighbor composition decreasing thereafter.

The strongest predictor of proportion neighbor is hours spent doing home chores. This result is consistent with prediction 9. All else equal, each hour spent doing home chores is associated with a .003 percent increase in proportion neighbor (p<.001). For instance, an average respondent (female, married, age 35, college educated, non-Hispanic, Catholic, employed, and geographically-stable with a network size of 4.41 and a gender role ideology score of 14.94) who spends a typical amount of time doing chores (about 5.5 hours) will have networks comprised of .74 percent neighbors. The model predicts that the same average respondent who does only two hours of chores will have a network comprised of zero percent neighbors, while she who does a full day of chores (10 hours) will have a network comprised of 2.07 percent neighbors.

Why are ties to neighbors unique in this positive association with hours doing
home chores? Wellman (1985) reported a similar association and attributed it to the demands of domestic work. Among several categories of work examined, the category comprised of persons most involved in unpaid domestic work was also the one with the highest involvement neighbors. Just as coworkers in paid work socialize, offer instrumental assistance, and commiserate, neighbors perform a similar role for the persons most involved in unpaid domestic work. Neighbors lend items, give rides to or watch children, help with demanding tasks, and provide emotional support for domestic work. Thus involvement in the domestic sphere shifts respondents' network associations away from friends and coworkers and toward greater involvement with neighbors.

**Network Density**

Network density is a measure of the proportion of actual ties among a respondent's network alters, relative to the number of such ties that are possible. As discussed in the previous chapter's retrospective analysis, several factors inhibited the quality of the network density data. As a result, analyses in this section are conducted with a slightly smaller sample, consisting of 107 males (98 percent of the this chapter's regular sample of males) and 218 females (98 percent of the this chapter's regular sample of females).

Compared to network density around the time of first parenthood, respondents' network density at the present time is significantly reduced. Women report that two-thirds of their network alters know each at the present time, while men report that one-half of their alters know each other. Results of paired t-tests indicate that both of these proportions are significantly lower than those reported from the retrospective
measurement periods (p<.001 and p<.05 for females and males respectively).

A combined analysis of network density which tested the effects of gender and of gender interactions with each of the other variables included in Table 5-11 (note that the table is 2 pages long) revealed significant gender interactions (F_{25, 289} = 2.654 p<.001). Indeed, the most striking feature of the separate regressions reported in Table 5-11 is the sex differences. The men's model explains nearly 42 percent of the variance in men's network density, while the women's model is not robust and explains only about eight percent of the variance in women's network density. Network size alone explains 12 percent of the variance in men's network density, but the contribution to explained variance of the set of age of youngest child dummies is even greater, at 15.8 percent. For men, the set of age of youngest child dummies constitute a significant improvement to the model (F_{7, 80} = 3.462 p<.01).

The many positive and significant coefficients for age of youngest child in the regression of men's network density indicate that the networks of men with young children tend to be significantly more dense than the networks of men whose children are school age. For example, the model predicts 33 percent of the network alters of a statistically average male whose youngest child is school age would know each other. The corresponding network density for statistically average male with an infant is .52. The years of intense childrearing thus appear to draw men into a more densely-knit pattern of association, a pattern similar to that evidenced in women's networks.
Summary and Conclusions

The cross-sectional analyses produced a number of important findings about the networks of parents with young children. Net of the demographic controls, several of the parenting context variables are correlated with parent's network properties. At a very general level, the finding provides some support for this study's broadest hypothesis, that parenthood itself shapes patterns of association. The concluding sections of this chapter will consist of a summary of effects of these substantive variables.

Age of Youngest Child

I controlled for age of youngest child with a set of seven dummy variables, which were contrasted to the omitted category of youngest child age seven or older. This modelling strategy is consistent with earlier research (see Munch et al. 1997) and produced many categories, which theoretically could produce information about age of youngest child effects in good detail. Unfortunately, the number of cases in these categories was rather small, particularly in the separate sex analyses. As a result, these analyses constitute a very conservative test of age of youngest child effects.

Results failed to support the hypothesis that age of youngest child is an important determinant of network structure for all but two of the dependent variables, kin composition and network density. In models predicting proportion kin, the set of seven dummy variables constituted a significant improvement in the model for women (p<.05), but not for men. Yet despite this contribution to explained variance, the substantive meaning of the particular significant coefficients remains difficult to interpret. Women
with 2-3 year olds as well as those with 5-6 year olds have significantly lower kin composition than their counterparts whose children are school aged. Wellman (1985) reports, and results here corroborate, that women most involved in domestic work tend have slightly lower kin composition, if only because it is supplanted by their greater involvement with friends and neighbors. It is possible that such an effect is present here, and is associated with these particular ages of youngest child, but results remain speculative.

 Though the set of dummy variables did not constitute a significant improvement to the men's model, the individual coefficient for age of youngest child <1 was positive and significant, indicating that men with infants tend to have significantly greater association with family members than their counterparts with older children. This finding is more easily interpreted, since new babies tend to stimulate family contact, particularly intergenerational contact.

 In addition to its relation to kin composition, age of youngest child is strongly associated with men's network density (p<.01). Many of the individual coefficients for age of youngest child are significant (or marginally significant) and general trend toward denser networks in the early years of parenting is consistent. We know from the kin composition analyses that men with infants are more kin-centered, so enhanced network density may result from the fact kin that tend to know each other. Consistent with earlier predictions, parenting appears to draw men into a pattern of association more like that of women, at least in terms of network density.
Since previous studies demonstrated very wide-ranging network effects of age of youngest child (Munch, McPherson, and Smith-Lovin 1997), it is a bit surprising that effects reported here are restricted to kin composition and network density. It is important to note that the modelling strategy employed in this chapter constituted a very conservative test of the age of youngest child hypothesis. And for most of the dependent variables considered here, individual coefficients for age of youngest child were frequently significant, even as the set of variables was not, so it is possible that different modelling strategies might bring more insight into the extent of youngest child's influence on social networks. For example, a more liberal test might divide the sample into categories based on the youngest child's developmental stage, such as infant, toddler, preschooler, and school age child. It is also important to note that the Munch et al. (1997) study did not include controls for a number of factors examined here, including ethnicity and recent geographic moves. Only when a number of modeling strategies are examined can the verdict on age of youngest child be definitive. On the basis of the analyses presented here, I must conclude that age of youngest child demonstrates some impact on parents' network structure, but that the impact is modest in comparison to some of the other parenting context variables.

Paid Child Care

A majority of parents in this study used some form of paid child care on a regular basis. Regression analyses revealed that the networks of paid child care users differed from non-users in one important area, contact frequency. While mothers using paid care
report significantly lower contact volume than their counterparts who do not use paid care (p<.05), fathers using paid care report significantly higher mean contact frequency than their counterparts who do not use paid care (p<.10). With respect to these two variants of contact frequency, it appears that paid child care has strongly gendered effects, restricting women's network association even as it enhances men's.

However, an interpretation of paid child care's significance would be incomplete without considering employment status. Employment is correlated with both women's contact volume and paid child care use, though the three variables do not overlap exactly.\(^\text{14}\) But because employed women report significantly greater contact volumes than their counterparts who do not work for pay (p<.10), we must interpret the negative association between paid child care and contact volume in light of the positive one between contact volume and paid employment. For a typical working woman who uses paid child care, the two effects net to only a slightly smaller contact volume than the one reported by her counterpart who doesn't work for pay and uses no paid child care.

Moreover, when we disaggregate by employment type, it is apparent that full-time employees have much higher contact volumes than their counterparts not working for pay (p<.05), while part-timers are indistinguishable from that same omitted category. The disaggregated analysis shows that the highest contact volumes are reported by full-time

\(^{14}\) It is possible for a woman to work for pay from her own home or to have her children watched by a father, grandparent or neighbor on a voluntary basis while she works outside the home.
working mothers using paid care. The lower contact volumes associated with paid child care use are thus completely offset by full-time employment.

The interpretation of paid child care use is further complicated by the positive association in models predicting men's mean contact frequency. These models demonstrate the importance of viewing the family as a system, where men's network effects depend on their roles as fathers and husbands, which in turn depend upon the roles of their spouses as mothers and breadwinners. Paid child care use was the only predictor of men's mean contact frequency in any of the initial models. However, we know that the use of paid child care is highly correlated with women's employment status. Further analyses (not reported here) with controls for respondent's spouse's employment status demonstrated that men's contact frequency is shaped more by spousal employment than by paid child care use.

Smith-Lovin and McPherson (1993) suggested that women's differential involvement in childrearing, by shaping patterns of associations, might be a crucial aspect in the creation of wide-ranging gender differences. In combination with women's employment, paid child care use offers at least the possibility of easing some of those traditionally gendered responsibilities. However, while employed men and women may maintain similar patterns of association during the work day, their lives continue to be shaped by differential responsibilities in the domestic sphere. It appears that the network benefits of paid child care use accrue mainly to men, whose spouses bear the burden of the second shift.
*Hours with Children*

Respondents were asked how many hours they spend taking care of or doing things with children on a typical working day and on a typical non-working day. The maximum of these two measures is negatively associated with men's network size (p<.10). I attribute this relationship to a competition mechanism whereby involvement with children necessitates a sacrifice of other associations and activities. A similar explanation is presented to account for the effect of hours doing domestic work.

Though the inverse relationship between hours with children and network size is consistent with hypotheses presented in the first chapter, it is somewhat surprising that the relationship holds for males but not females. This may result from the fact that there is more variation in male responses to these items than there is in female responses, indicating that males spend time with children only after their other role responsibilities are fulfilled and then at their discretion, whereas a significant proportion of females report that they spend time taking care of or doing things with children all day and every day.

Utilizing a different measure of time spent with children might yield slightly different results, perhaps uncovering a similar inverse relationship among females which is suppressed by the lack of variation at the maximum end of the scale. For example, one could elect to use the minimum of the working and non-working day measures, or one could take the average. These strategies might add more insight into the nature of the relationship between hours with children and various network properties.
**Hours Doing Chores**

Respondents were asked how many hours they spend performing household tasks (including cooking, cleaning, repairs, shopping, yardwork, and keeping track of money and bills) on a typical working day and on a typical non-working day. The maximum of these two measures is correlated with more network properties than any of the other parenting context variables. This type of involvement in the domestic sphere is negatively associated with proportion coworker among men \( (p<.05) \), negatively associated with proportion friend among all respondents \( (p<.01) \), and positively associated with proportion neighbor among all respondents \( (p<.001) \). As in the case of hours with children, the inverse relationships probably result from trade-offs in the competition for scarce resources of time and energy. Fathers who cook dinner for their families, for example, are generally unavailable for socializing after work with coworkers. Similarly, parents who mow their own grass, change their own oil, and clean their own homes have less time available for getting together with friends.

On the other hand, this form of domestic involvement is positively associated with the small proportion of respondents' networks that is comprised of neighbors. Consistent with Wellman's (1985) argument, it seems likely that ties to neighbors are most likely to be maintained when they are particularly useful, as they are to the respondents most heavily involved in domestic work. Neighbors are the people most available to lend assistance to persons doing unpaid domestic work--assistance in the form of materials, services, and even emotional aid.
As in the case of hours spent with children, it is possible that different variants of this measure might produce slightly different, and perhaps more enlightening, results.

However, it seems quite evident that involvement in the domestic sphere is strongly correlated with a particular form of network structure that emphasizes neighbor relations over ties to friends and coworkers.

**Number of Children**

Net of other factors, the number of children in the home is positively associated with women's network size (p<.05) and negatively associated with women's coworker composition (p<.10). We have already discussed the extent to which women's employment, paid child care use, and men's greater involvement in parenting and the domestic sphere are associated with greater similarity in men's and women's network associations. The evidence also suggests that women's patterns of association are greatly influenced by the size of their families, and that having large families exacerbates gender differences in network association, despite these other factors. Women's networks are significantly larger than men's to begin with, and additional children make them larger. Women's networks are comprised of fewer coworkers than men's networks to begin with, and women with additional children report still fewer coworkers.

The demands of many children are likely to account for both of these results.

Women with many children need large networks to offer the kinds of support they likely require to fulfill their many parental responsibilities. Ties to coworkers are probably the least helpful in this endeavor, especially as compared with those to kin, friends, and
neighbors. We know from the retrospective data that women tend to drop coworker ties around the time of parenthood's onset. For women with large families, this shift away from coworker relations appears to be a long-term one.

**Conclusion**

Researchers have sought to account for gender differences in social networks for at least the last several decades. By focussing on the life course stage of parenting's most labor intensive years, this study elaborates on that theme by linking network structure to the gender differentiated tasks of childrearing and domestic work. in the tradition of Bott (1957), Fischer and Oliker (1983), and McPherson and Smith-Lovin (1993). Of the many analyses of network properties conducted in this chapter, all but two (those for proportion friend and proportion neighbor) revealed significant gender interactions.

But beyond simply indicating that men and women are different, these analyses, when taken together, have a fairly consistent story to tell, which is that many gender differences in patterns of association (as well as within-sex differences in patterns of association) may be attributable to the burdens of domestic work. And this is hardly surprising, since domestic work comprises a great deal of what "doing gender" (Berk 1985; West and Zimmerman 1987) is all about. To the degree that men are more involved in domestic work, as measured by actual hours spent doing chores or taking care of children, the composition of their associates begins to resemble that of women, with a lesser emphasis on coworkers and a greater emphasis on neighbors. To the degree that family size remains average or small, women's patterns of association are modestly
different from those of men. But when domestic responsibilities are increased, as they are for women with large family sizes, gender differences (particularly with respect to network size and proportion coworker) are significantly enhanced. It is most certainly true that the manner in which the monumental task of parenthood is accomplished (including such variables as the number of children in the household, the division of household labor, the use of paid child care, among others) will have significant repercussions for parent's social networks.
CHAPTER 6: PARENTHOOD, SOCIAL NETWORKS, AND SUBJECTIVE WELL-BEING

Depression in the postpartum period is a relatively common occurrence, thought to affect approximately one-third of all women (Cutrona 1982). However, despite its frequent incidence, postpartum depression is not well-understood. The degree of depression following a pregnancy can range from a mild, commonly-experienced variant called "baby blues" to a severe depressive psychosis. The etiology of these conditions may differ, as women with the most severe cases of postpartum depression often have histories of mental illness while those with the milder variant typically do not (O'Hara, Rehm, and Campbell 1983), but there is some suggestion by medical researchers that a sudden drop in the levels of certain hormones which were elevated during pregnancy may be the trigger for the weepiness, blahs, and other symptomology which often follow it (O'Hara, Schlechte, Lewis, and Wright 1991). However, several factors cast doubt on a purely biological explanation for postpartum depression.

First, in symptomology, depression in the postpartum period cannot be distinguished from that occurring at other stages in the life cycle (Hopkins, Marcus and Campbell 1984; Whiffen 1992). Additionally, cross-cultural studies by medical anthropologists conclude that postpartum depression is not culturally universal (Stern and Kluckman 1983; Harkness 1987). And finally, depression in the postpartum period is not experienced by women exclusively. In fact, it may be nearly as common among fathers as it is among mothers (see Richman et al. 1991). The incidence of depression in the
postpartum period among men is a clear justification for non-biological approaches to the study of postpartum depression, and there is every reason to suspect that it, like other forms of depression, might have some social basis (see Brown and Harris 1978; Mirowsky and Ross 1989).

Psychologists studying postpartum depression suggest that multiple factors ought to be considered in its etiology. Risk factors generated from this perspective include low motivation for the pregnancy, internal conflicts with respect to motherhood or feminine identification, anxiety, hostility, and self-critical thought patterns (see Fedele, Golding, Grossman, and Pollack 1988). A more social perspective emphasizes a different set of factors including demographic characteristics and socioeconomic status. From this perspective, deficits in social support are believed to play an important role in postpartum depression (see Hopkins et al. 1984).

With a sample from a general population of parents (rather than a sample of depressed puerpal women) I will explore the utility of a different approach to depressive symptomology in the postpartum period and later. Building on the tradition of survey studies of mental distress, I examine the social forces correlated with depression in years of childbearing and rearing. While not discounting biological and psychological factors, the approach presented here emphasizes the correlates of depressive symptomology in certain patterns of social relations. In the previous two chapters I demonstrated that specific patterns of association among parents are linked with such factors as transition timing, education, and hours spent doing housework. In this chapter, I will discuss the
extent to which these patterned differences in networks and childrearing context are associated with the individual outcomes of postpartum depression and subjective well-being.

**Duration of Postpartum Depression**

Using the Bromley Postnatal Depression Scale (see Stein and Van den Akker 1992), I asked survey respondents to recall whether there was "a period of a few weeks or months starting in the first year after your child was born when you felt depressed or low spirited, or rather anxious with times of panic, slept poorly, wept very frequently, couldn't really laugh or enjoy anything, felt irritable and in poor temper, had headaches, or felt awful much of the time?" (see Appendix A, page 16). As discussed in Chapter 2, this retrospective measure of postpartum depression covers a broad array of symptomology but is general enough such that respondents need not have accurate memories of particular symptoms in order to judge whether the description applies to them. Respondents answering yes to this question were asked to recall how old the baby was (in months) when the feelings began and ended.

It is estimated that 50-70 percent of women experience transitory symptoms of depression (postpartum blues) in the weeks following childbirth, while a smaller proportion (3-33 percent) is believed to experience depressive symptomology of greater duration or severity (see Cutrona 1982). Consistent with earlier findings, 58 percent of women in these data reported experiencing symptoms of depression in the weeks or months following the birth of their first child. Interestingly, 18 percent of male
respondents also reported experiencing symptoms of depression following the birth of their first child. These data suggest that the incidence of depression in the postpartum period may be greater than commonly recognized, especially among men (but see Wainwright 1966; Lacoursiere 1972; Cavenar and Weddington 1978).

In fact, several respondents indicated that the birth of their first child was a "triggering event" (see Brown and Harris 1978) for depressive symptoms of ongoing duration. A few female respondents wrote in the margins of the survey that their depression has never ceased, and some of these provided brief explanations. For instance, one female respondent wrote that her first child was born severely handicapped, resulting in her ongoing depression. Due to circumstances such as this, the range of the duration measure among females is quite broad, from zero to 227 months (nearly 19 years), with seven female respondents reporting depression longer than 36 months. Depression among males, on the other hand, appears to be considerably more transitory, with durations ranging from zero to 35 months. Among respondents who experienced postpartum depression, the mean duration was 11.42 months. When non-depressed respondents are included in the analyses (by coding duration=0), the mean duration drops substantially, to 6.62 months among females and 1.97 months among males.

The duration of postpartum depression is the dependent variable for analyses in

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15 The median duration of postpartum depression (a measure less sensitive to outliers) is 5 months, comparable to the modal range of 2-6 months observed in Taylor's (1996) study.
this subsection. The means and standard deviations for dependent and independent variables in this section are reported in Tables 6-1 and 6-2, respectively. All models predicting the duration of postpartum depression controlled for a variety of factors which might influence the manner in which the transition to parenthood is experienced by a respondent. Discussed in previous chapters, these factors include transition timing, relationship status, ethnicity, gender role ideology, and whether or not a geographic move was experienced in the year following the birth of the first child.

The general strategy of the analyses in this section was to determine, net of these factors, whether social networks play a role in the etiology of postpartum depression. Combined and separate-sex analyses were conducted, and individual network characteristics from the retrospective analyses were inserted into the models to see whether the explained variance was significantly improved. Similarly, change scores from the retrospective analyses were also tested, so that it was possible to determine whether respondents whose networks changed over the year following the birth of their first child (e.g., became smaller in size or more female in composition) were likely to have longer durations of postpartum depression.

The results of the OLS regression were similar for every configuration of network variable, and can be summarized with one exemplary model, reported in Table 6-3. Though the main effect of gender is significant, there are no significant gender interactions in models predicting the duration of postpartum depression. Net of other factors, the duration of depression in the postpartum period reported by women averages nearly five
months longer than that reported by men (p<.05).

Explaining the gender effect in psychological distress has been a mainstay of social psychological research; women consistently report greater distress, but reasons for the gender disparity remain enigmatic. Perhaps women are more distressed because they occupy less satisfying roles (e.g., Gove and Tudor 1973; Kessler and McRae 1982), or perhaps because they are often dominated in relationships by their more powerful spouses or partners (e.g., Mirowsky 1985). To the extent that it is accompanied by an exacerbation of these gendered differences in domestic responsibilities and marital power, the birth of a child may be a likely trigger of depression in the postpartum period. Moreover, because women tend to be more invested than men in the parental role, they may experience greater discrepancies between their actual circumstances and those they visualized (and perhaps idealized) in their pre-parental state (Alexander and Higgins 1993). All of these factors may play some role in the gendered nature of depression in the postpartum period.

In addition to gender, two other factors were consistently correlated with the duration of postpartum depression: relationship status and recent extra-local moves. As indicated by the negative coefficients for all the of the relationship status variables, being in a relationship in which one lives with a spouse or partner (either married or cohabiting) at the time of first parenthood is associated with shorter durations of postpartum depression. The separate-sex regressions (not reported here) indicated that this was particularly true of men, but not women. In these combined-sex results, only the
coefficient for the group of respondents who were married to someone with whom they first cohabited is marginally significantly different (p<.10) from the omitted category of respondents not living with a spouse or partner. All else equal, the duration of depression among such respondents is 6.39 months shorter than among single respondents.

The link between marital status and general psychological well-being is one of the most strongly established patterns in social science research on mental health (e.g., Hughes and Gove 1981; Mirowsky and Ross 1989). Previous research suggests, and results reported here confirm, that this association applies to the puerperium as well. For example, O'Hara et al. (1983) and Collins et al. (1993) report less severe postpartum depression among women with spousal support. The postpartum period is an exceptional life course stage with respect to a number of major personal and household adjustments. It appears that those who experience the trials and joys of the transition to parenthood without a partner have greater difficulty in making these adjustments.16

The coefficient with the largest magnitude and significance is that for recent move outside the local area. All else equal, respondents with extra-local moves in the year following the birth of their first child experienced depression lasting 10.85 months longer than their counterparts who did not move (p<.001). While the birth of a child and moving

16 Additional analyses (not reported here) were performed to determine whether the length of a respondent's relationship with a live-in partner or spouse prior to parenthood was correlated with the length of postpartum depression. Previous research has suggested that parents who have been married longer before having children are likely to experience greater postpartum depression (see Alexander and Higgens 1993). No such relationship was observed here.
to a new town are not terribly undesirable life events in and of themselves—and are therefore not commonly regarded as distress-producing (e.g., Williams, Ware and Donald 1981)—the pile-up of these two particular events may result in a deficit of social support, just when the need for such support is particularly acute. Confirming an association between social support and subjective well-being, this finding suggests that people uprooted from face-to-face network contacts (such as family members, coworkers, friends, and neighbors) fare less well as they undergo the multi-faceted adjustments of the life transition to parenthood.

These results fail to support the hypothesis that social networks play a role in the etiology of postpartum depression. Particularly striking was the absence of a correlation between the length of postpartum depression and contact frequency, which has been reported as evidence for a mobilization of social support in previous studies (e.g., O'Hara et al. 1983; Collins et al. 1993). On the other hand, the results are consistent with a wide body of literature demonstrating the importance of social support in subjective well-being. Persons married or in a cohabiting relationship are in a better position to receive a variety of forms of assistance, as compared to their counterparts not in such relationships. Similarly, persons with a stable residence are more likely to have a stable set of associates. In contrast, movers lose the buffering effect of social support networks and the familiar comforts of home just when a pile-up of life events indicates they might need them the most.
Current Subjective Well-being

I assessed respondents' current subjective well-being with the Edinburgh Postnatal Depression Scale (see Cox, Holden and Sagovsky 1987). The index is short, sensitive to postpartum depression, and general enough to be acceptable to persons who consider themselves healthy. Scores can theoretically range from zero to 30, with higher scores signifying greater depression and 12/13 used as a cut-off point for diagnostic purposes. In these data, scores range from zero to 25 with a mean of 7.74. As in many previous studies (see Gove and Tudor 1973; Kessler and McRae 1982), women report significantly greater depressive symptomology, with a mean of 8.25, as compared to 6.69 among men.

In modelling current subjective well-being, I used a strategy similar to that employed in the previous chapter. I began with a full model, consisting of a set of parenting context variables (age of youngest child, number of children living in the home, number of hours spent taking care of or doing things with children, number of hours doing home chores, gender role ideology, and household power) as well as a set of demographic controls (age, education, employment status, ethnicity, religion, and recent geographic moves). A reduced model was then constructed with the set of demographic controls and only those parenting context variables that were significant, net of the demographic controls. Finally, network characteristics were added to the reduced model to determine whether any constituted a significant improvement in explained variance. The means and standard deviations for all variables used in the final reported model are presented in Table 6-4.
Combined-sex analyses revealed no significant gender interactions in models predicting current subjective well-being, though the main effect for gender in the model reported in Table 6-5 is significant (p<.05), indicating that all else equal, women score about one-and-a-half points higher on the depression index. Several of the demographic controls are also associated with subjective well-being. People who claim a religious affiliation, for example, tend to have lower scores on the depression index, though only the pro-family "other Christians" are significantly different from the omitted category. All else equal, other Christians score an average of 2.27 points lower on the index than non-believers (p<.05). This result is consistent with several previous studies reporting greater life satisfaction among people strong religious belief (Lindenthal et al. 1970; Lam and Rotolo in press).

The control for a recent change of residence is positive and marginally significant (p<.10), indicating that movers tend to have higher rates of depression, all else equal. This finding replicates a similar result from the retrospective data--parents who moved extra-locally within the year following the birth of their first child tended to have significantly longer durations of postpartum depression.

In addition to these demographic controls, several of the parenting context variables are also predictive of the degree of depression. Both the number of children living at home and egalitarianism in gender role ideology are negatively associated with depression, while the number of hours spent doing home chores is positively associated with depression. All else equal, each additional child is associated with a reduction of 0.84
points on the EPDS index (p<.01). The model predicts that an average female respondent with one child will score 8.71 on the index, whereas her counterpart with four children will score only 6.19. Previous studies (e.g., Rollins and Feldman 1970) have reported an inverse relationship between the number of children and satisfaction levels, so this finding appears to represent a deviation from social science canon. However, it is important to bear in mind that this study controls for gender role ideology, marital status, employment status, and many other factors which might mediate the relationship between the number of children and subject well-being. Moreover, this study does not compare the depression levels of parents to those of non-parents, but rather those of parents in particular contexts to those in other contexts. Given these important conditions, the apparent reversal in the childrearing/depression relationship is more easily accounted for. It may simply result from the tendency of persons with greater subjective well-being to reproduce at a higher rate. On the flip-side, persons with lower subjective well-being (due to bad jobs, bad marriages, or just a generalized negative outlook) may be more reluctant to procreate.

In addition to number of children, egalitarian gender role ideology is also negatively associated with depression. All else equal, each increased point on the gender role index is associated with a reduction of 0.24 point on the EPDS (p<.05). For example, the model predicts that an otherwise average female respondent with very traditional gender role ideology (a score of 10 on the gender role ideology index) will score 9.26 on the depression index, whereas her counterpart with very egalitarian gender role ideology (a score of 20 on the gender role ideology index) will score only 6.86 on the depression
Adherents to traditional gender roles are relatively constrained with respect to their activities and beliefs, and role ideology has not kept pace with several decades of large-scale economic change. In most families, economic considerations result in children using day care while women work outside of the home. To the extent that these arrangements violate a parent's deeply held beliefs about what is good or right, then this dissonance may result in reduced subjective well-being (Ross, Mirowsky, and Huber 1983).

Parents who spend more time doing home chores tend to report greater depression, all else equal. Each additional hour devoted to domestic work is associated with a 0.24 point increase in EPDS score (p < .01). The predicted value for the EPDS score of an average female respondent who does a relatively light load of house work (3 hours' worth) is 7.35, whereas the predicted score for her counterpart who spends twelve hours on home chores is 9.47. This substantial difference in outcomes could result from several different mechanisms. Perhaps an unfair distribution of domestic work makes the people who get stuck doing it more depressed. Or perhaps both greater depression and greater involvement in domestic work result from a personality disposition toward worry over life's many small details. In any case, this finding appears contrast with those of earlier studies (e.g., Kessler and McCrae 1982; Ross et al. 1983) reporting that shifting the burden of domestic work toward husbands does not appear to be associated with elevated levels of distress among men. However, those studies used less objective measures of housework which were biased toward tasks traditionally performed by females. These data demonstrate a clear correlation between domestic work and psychological distress.
Finally, we note that network structure is also associated with subjective well-being. Net of the demographic controls and the parenting context variables discussed above, subjective well-being is positively associated with the kin composition of parents' networks ($p<.05$). For example, the predicted EPDS value from the model in Table 6-5 for an average female respondent with a network comprised of 20 percent kin is 8.72, whereas the predicted value for her counterpart with a network comprised of entirely of kin is 7.47. A large part of the social support literature is devoted to the importance of supportive relationships as buffering agents in negotiating life stress (see Kessler and McCleod 1985). This finding is consistent with that literature; parents whose networks are comprised mainly of kin appear to fair better in terms of their subjective well-being. On the other hand, previous research has also suggested that the effect of kin ties on well-being may be gender-specific (see Gerstel 1988b). These results imply that kin ties are uniformly beneficial to psychological health.

Conclusion

The importance of social networks has been demonstrated for a number of outcomes ranging from finding a job (Granovetter 1973) to joining a social movement (McAdam 1986). In this chapter I explored the degree to which parents' network configurations are linked to their subjective well-being in the childrearing phase of the life course. Results of these analyses suggest only modest support for the hypothesis that social network structure is associated with well-being. Among all aspects of network structure considered here, only kin composition was influential in models predicting
current subjective well-being, and no network variables were significant in models
predicting the duration of postpartum depression.

The fact that kin composition is positively associated with subjective well-being is
hardly surprising. Like married people and people who change residences very
infrequently, people who associate mainly with their relatives tend to have very stable
networks rich in a particular kind of information. These kinds of networks are not likely
to be cosmopolitan, diverse, or even very exciting, but they do tend to provide the steady,
nurturing support that helps individuals to happily stay the course through the turbulences
of life.
CHAPTER 7: SUMMARY, DISCUSSION, AND CONCLUSION

This study does not lend itself to quick, linear summary. With reference to three distinct recall periods, I have considered the influence of nearly a dozen factors on almost as many structural properties of parents' social networks. Table 7-1 presents a greatly over-simplified comparison of the predicted relationships generated in Chapter 2 and results from the data. As evidenced in the table, many predictions are supported to varying extents by the data, while some are not supported at all. The table clearly highlights the importance of gender as an underlying mechanism in the network processes examined here. The predictions with the strongest support were those pertaining to gender and sphere specialization. Predictions pertaining to transition timing were supported for women only, while support for predictions pertaining to ethnicity was restricted mainly to men. Patterns relating to family form, on the other hand, appear to operate independently of gender. Since summaries of particular results have already been presented at the conclusion of each substantive chapter, I will use this final chapter to discuss the significance of this research, as well as the possibilities and limitations inherent in it, in even broader terms.

I will begin this chapter with a presentation of this dissertation's principle findings. Following this, I will briefly discuss the potential significance of these findings. Though this research was conceived and implemented primarily to provide a descriptive account of the social structure of parenthood, it is generative only to the extent that it can help us to understand some of the broader processes which shape social life. With this in mind, I will
conclude the chapter with some suggestions for future research.

Methodological Findings:

- **AN UNCONVENTIONAL RESEARCH SITE OFFERED ACCESS TO A LOCALLY REPRESENTATIVE SAMPLE OF PARENTS WITH YOUNG CHILDREN.** This represents an important advance because previous research on the transition to parenthood has relied primarily on convenience samples (see Goldberg and Michaels 1988), and could be generalized to only a limited segment of the population: two-parent families in the white, middle-class. Also, because the sample has a large Hispanic component, these data allow for a thorough examination of previously unstudied ethnic differences in social networks.

- **A RETROSPECTIVE STUDY OF SOCIAL NETWORKS CAN BE SUCCESSFULLY PERFORMED.** Respondents appeared to have no obvious difficulty (but see below) with a retrospective application of Fischer’s (1982) name generator, even though it has never before been used in this manner. Retrospective network data represent an entirely untapped resource in social network research, so this finding represents an important methodological starting point.

- **THERE IS EVIDENCE OF LIMITED MEMORY DECAY IN THESE RETROSPECTIVE NETWORK DATA.** Lengthier recall periods are associated with smaller social networks. This is consistent with previous studies (e.g., BKS) which have questioned the reliability of retrospective network data. However, the magnitude of the decay effect is incredibly small. Women’s networks, for example, are reduced by only .007 alters for each added year of recall. While not trivial, this form of recall bias has no obvious implications for the
present study.

• **The circular diagram developed here for measuring density among network ties is concise and effective (but see below) in a self-administered format.** While telephone surveys such as the GSS (see Marsden 1987) and the Ten Towns Study (see Munch et al. 1997) have used different and perhaps more reliable techniques for eliciting similar data, these other techniques cannot readily be applied to a self-administered questionnaire.

• **In future applications, this diagram should be accompanied by more written and oral instruction.** Despite the overall success of this new method for measuring network density, it was certainly the most taxing element of the survey instrument, and the one with a relatively high rate of missing data.

• **There is no reason to suspect that memory decay is a factor in the retrospective measure of postpartum depression.** Neither the likelihood of claiming to have experienced depression nor the length of that depression are associated with the length of the recall period.

**Empirical Findings:**

• **Parenthood itself may be a unique structural location, characterized by certain patterned relations.** Many group differences in network structure among respondents in their pre-parenthood state were reduced or eliminated by the time of the oldest child's first birthday. For example, the timing of the transition to parenthood (early, on-time, or delayed) is associated with significant pre-parenthood differences in network
size among women. By the time of the oldest child's first birthday, however, size differences are only modest (see Tables 4-3 and 4-4 and Figure 4-1). Similarly, pre-birth timing-group differences in contact volume, proportion coworker, and network density are no longer present by the time of the child's first birthday. No previous research has established the network significance of parenthood in this manner or to this degree.

- With the onset of parenthood, social networks change in a number of important ways. The most global shift in composition is the tendency for both fathers and mothers (but especially mothers) to de-prioritize coworker contacts. Previous research (see Munch et al. 1997) demonstrated that mothers' networks are restricted in the years of intense childrearing. The present study suggests that the degree of restriction is mediated by structural location: network shrinkage is most pronounced among Hispanic mothers and women who delayed childbearing.

- The social networks of parents are crucially shaped by childrearing in context. The number of children in the household, the age of the youngest child, hours spent taking care of children, and whether or not paid child care is used, each influence specific network properties. These relationships imply that parental status is not merely a dichotomy, but is more usefully conceptualized as continuum, perhaps with multiple indicators.

- The relationship between parenthood and social networks is gendered. There are significant gender interactions for a majority of the dependent variables examined here. Gender role ideology, as well as housework and childcare patterns, were
also correlated with a number of network properties. For example, persons who devote a
great deal of time to home chores tend to associate more with neighbors and less with kin.
The evidence thus suggests that certain aspects of "doing gender" (West and Zimmerman
1987) may actually create what network researchers have come to accept as traditionally
male or female patterns of association. Perhaps these patterns of association are part of
"doing gender" as well.

- **There are significant ethnic differences in patterns of personal association.** Previous studies of Hispanics' networks have yielded inconsistent results. However, most research has been based upon samples that are small (inhibiting multivariate analyses) or non-probabilistic (lacking generalizability). All else equal, compared with their non-Hispanic counterparts, the networks of Hispanics are characterized by more frequent contact with network alters and a lesser reliance upon friends and coworkers as important decision consultants. Though the networks of Hispanic fathers display greater kin-centeredness around the time of the transition to parenthood, ethnic differences in kin composition appear to become attenuated in the subsequent years of childrearing.

- **Kin composition is the only network property clearly associated with subjective well-being.** The importance of social support in psychological adjustment has been well-established in previous research, and is confirmed here with the findings that geographically stable parents living with a spouse or partner fare better, emotionally, than singles and movers. But net of these factors, a kin-based network is also associated with
greater well-being. Kin ties are unlikely to provide very diverse kinds of information (such as job leads—see Granovetter 1973), but the redundancy of the supportive information they likely do provide is beneficial in its own way.

Discussion

Transition to parenthood researchers have often assumed that parenthood is a stimulus for network change and disruption, but little in the way of systematic research has been done to document this, until now. A basic and thorough account of the kinds of network changes new parents typically experience is the most important product of this study. Even so, the research can also be used to expand and clarify particular strains of social theory.

Clearly, the structural transformation in network relations that comes with parenthood's onset depends upon the new parent's initial position in social structure. I anticipated this, and spent some time developing predictions tailored to parents in different situations. Many of these predictions were borne out in the results, but what sprang unexpectedly from those results was the trend toward increased similarity in all parents' network relations. This trend suggests that parenthood itself is a distinctive social position, with an influence on social associations that is perhaps greater than previously recognized. As such, this commonly-experienced life course status may actually reduce the distinguishing power of other structural parameters, particularly those of ethnicity and chronological age. At the same time, it may enhance others.
Thinking about Gender

In her analysis of men's and women's social networks, Gwen Moore (1990) argued that any gender differences in patterns of association can be attributed to structural constraints imposed by gender roles in marriage and parenthood. Smith-Lovin and McPherson (1993) further asserted that gender itself is produced in patterned access to different kinds of information, and that childbearing and rearing may be crucial in this process by which gender differences are created and maintained. The present study was not designed to systematically test these ideas; in fact, they are working assumptions underlying the research. Nevertheless, there is now a much larger body of evidence that can address these claims.

The retrospective data permit a comparison of networks pre- and post-parenthood. These data clearly show that subtle shifts in men's and women's personal network composition accompany the transition to parenthood. Further, these shifts appear to enhance the distinguishing power of gender as a structural parameter. For example, Figure 7-1 illustrates men's and women's network sizes before and after parenthood. Prior to parenthood, there is a sizeable gender gap in average network size. But after parenthood, the gap is even greater. Similarly, Figure 7-2 illustrates changes in three measures of network composition: proportion kin, proportion coworker, and density. As shown in the figure, both men and women tend to become less involved with kin and coworkers following the transition to parenthood, and their networks become less dense. These changes alone are interesting. But what is even more interesting is that the
magnitude of the gender gap in both kin composition and network density increases. Though the relationship between parenthood and various network properties is similar for both men and women, a subtle gender interaction appears to enhance previously existing gender differences at parenthood's onset. Along with significantly reduced coworker associations, the structural location of women after parenthood is characterized by enhanced density and kin-centeredness, relative to men.

Previous structuralist accounts (including those described above) have argued that men's and women's differential involvement in particular roles accounts for the structural differences observed in their networks, yet network research has not typically accounted for these very roles. Because this study controls for factors like housework and paid child care use, we can now stake an even broader claim for the structuralist argument. It is clear from the cross-sectional component of this research that those who are most involved in the domestic sphere, be they male or female, have identifiable network attributes. Compared to their counterparts who spend less time doing housework, their networks are comprised of fewer friends and coworkers, and more neighbors—rather like the networks Bott (1957) observed among working-class English women with traditional conjugal roles. This enhances and clarifies the structuralist argument, for we can see the impact of gendered roles operating independently of sex-category. Of course, there are gender differences in the occupancy of particular roles, producing different opportunities for and constraints against particular social associations. But as these gender differences are mitigated by contemporary trends in marriage and parenting (such as dual career
families and "involved" fathers—see Bronstein 1988), it seems entirely possible that gender differences in social contact could gradually whither away.

It is likely, however, that a significant proportion of families will adopt a division of labor characterized by task specialization in either breadwinning or childminding. Researchers should therefore adopt a nomenclature emphasizing role occupancy over sex-category in predicting patterned social relations. Wellman (1985) used a strategy like this in his study of 'producers', 'reproducers', and 'double-loaders' (though empirically, these categories were sex-specific in his study). This research confirms that involvement in the domestic sphere has tremendous power in shaping patterns of association. For example, the single factor most predictive of neighbor composition is daily hours spent doing home chores. By contrast, sex differences are insignificant (see Table 5-10). Since domestic work and paid work roles are becoming increasingly varied and flexible, a time-use strategy for conceptualization and measurement of these constructs (like the one used here) seems appropriate.

To summarize, the results point toward a few important findings about gender. First, the transition to parenthood is accompanied by changes in parents' structural location. While expectant parents may differ in their patterns of social contact, depending upon such factors as transition timing, relationship status, or ethnicity, many of these preparenthood differences are no longer apparent by the time of the child's first birthday. At the same time, gender differences in social network position become more pronounced in the year following parenthood's onset. However, these increasingly gendered patterns in
social contact are not attributed to dispositional differences in men and women. Rather, it is clear from the cross-sectional data that greater involvement in the traditionally female arena of domestic work and child care is associated with particular patterns of social contact, irrespective of sex-category. In the structuralist account, men's and women's differential involvement in particular roles accounts for the differences observed in their networks, yet network research has not typically accounted for many of these roles. Data from this study provide the most comprehensive support for the structuralist argument to date.

Thinking about Ethnicity

The data in this study are also well-suited to examining ethnic differences in personal social networks. And for every network property examined here, ethnic differences were detected in some or all of the data (retrospective and cross-sectional). As compared to the networks of non-Hispanic parents, those of Hispanic parents tend to be more kin-centered, characterized by greater contact frequency and a lesser emphasis on friends as decision consultants. Since social network ties are basically conduits for different kinds of information, ethnic differences in social networks may help to account for ethnic disparities in other outcomes, such as educational and occupational attainment. For example, explanations for the widening education gap between Hispanics and other groups (e.g., Bean and Tienda 1987) have emphasized the importance of family, school, and cultural characteristics. A study of formal network properties might use a redundancy of information argument (e.g., Granovetter 1973) to clarify these explanations.
In addition to considering the consequences of ethnic differences in patterns of association, we should also consider their causes. Physical propinquity may be important in this regard, as both "an element of social structure" and "a condition that shapes it" (Blau 1977: 91). For example, Schweizer et al. (1998) report that, compared with Anglos, Hispanics tend to live in closer proximity to their network alters. Data from this study confirm such a tendency. In the cross-sectional component of these data, the mean geographic distance (measured ordinarily) between non-Hispanic respondents and their alters is 1.907. Hispanics are significantly closer to their alters (p<.01) with a mean distance of 1.576. Though Hispanics are no more likely than non-Hispanics to name a neighbor as a decision consultant, it does appear that Hispanics are much more likely to associate within a local neighborhood (i.e., with people in a 5 minute radius from them). Ethnic differences in contact patterns (particularly in density and contact frequency) may result from differing tendencies to live in close physical proximity with one's associates.

However, a thoughtful discussion of ethnic differences in social contacts also must consider the possible influence of cultural factors beyond the scope of formal network properties. If culture influences the content of the network (i.e., the kinds of decisions one would consult an alter about) or decision-consulting patterns (e.g., the number and types of alters one consults in making decisions), then a study of formal network properties might simply reflect these basic cultural differences without explaining them very well. However, if culture influences respondents' basic understanding of terms like "kin" or "friend", then a comparison of ethnic groups' contact patterns becomes more
problematic. Unfortunately, there is some evidence that culture may play such a confounding role.

We assume, for example, that the finding of greater kin composition in Hispanics' networks (replicated in several different studies) results from Hispanics' greater tendency to name persons related to them by blood or marriage as decision consultants. Even Burt, a validity-cautionist in network studies, cites kinship as one of the few areas "in which relations can be measured concretely to be comparable across relationships" (1990: 415). However, network studies have yet to take into account the Hispanic compadrazgo system and similar fictive kin relations (see Lopez 1999). Alters who might otherwise be termed friends or neighbors could thus be considered as family members when social contacts are intimate or sustained. Of course, a basic structural factor could also account for greater kin composition in the networks of Hispanics; relative to other groups, Hispanics tend to produce larger families (del Pinal and Singer 1997), which might elevate the salience of kin in their networks.

If the definition of 'kin' is culturally specific, the same could be said of 'friend.' As Wierzbicka argues, "The concept of 'friend', and the relationship linked with it, are important in Anglo culture, but it is an illusion to think that they must have their counterparts in all other cultures and that they are somehow part of human nature" (1997: 32). In fact, the meaning and importance of friendship are culture-dependent, and perhaps even subculture-dependent; in the memorable example used by Burt, "What the heroin addict understands to be friendship probably differs from the suburban housewife's
friendship" (1990: 414). It therefore seems plausible that the lower friend composition observed in Hispanic networks across all three data components analyzed here (as well as in other studies—see Schweizer et al. 1998) results from a different understanding of the term 'friend'.

To summarize, this research has identified a number of ethnic differences in personal networks. The higher network density and contact frequency observed among Hispanics might result from the tendency for Hispanics to live in closer geographic proximity with their network alters than their non-Hispanic counterparts. Compared to density and contact frequency, however, network compositional measures must be interpreted with greater care since the taxonomy of human relations is not culturally universal. Existing literatures suggest that Hispanics participate in an expansive kin system which is not restricted to relatives by blood or marriage. Friendship composition may also be affected by the lack of a precise definition for the English word 'friend' (Wierzbicka 1997). Ethnic differences in friendship composition might thus result from the fact that the concept of 'friend' lacks an exact equivalent in other cultures. These kinds of issues must be considered as we forge ahead in the study of ethnic differences in social contacts.

Research Agendas

The data utilized here have uncovered a number of important findings, yet some meaningful issues pertaining to social networks in parenthood remain unaddressed. One of these is the relative importance of various structural properties. We can't tell from the
data which types of alters are most helpful to parents as they negotiate work and family roles, for example. Nor do we understand the long-term outcomes of particular network arrangements. These data suggest a permanent reduction in coworker contacts with the onset of parenthood. But does this structural transformation impact occupational outcomes of parents, and if so, how? How does the social universe of parents compare to that of non-parents more generally? Finally, despite the use of longitudinal data, there are unsettled issues of causation in the relationship between parenthood and social networks. Parenthood is an event accompanied by network transformation, but many of the mediating factors are themselves products of network influence. Transition timing, for example, depends to a certain extent on fertility information available in a network of various socializing agents including parents and peers (see Fox et al., 1982; Hoffman 1978). Similarly, fatherhood involvement is also the product of network influences (see Riley 1990). These issues merit further consideration and investigation in future research.

Despite these limitations, I have by no means exhausted the possibilities for research with the data collected and analyzed in this dissertation. A very systematic assessment of the reliability of retrospective network data would be a logical starting point for any future investigations. In the current research, I restrict attention to a thorough and unique account of social networks in parenthood, rather than focus on complex measurement assessment strategies. Nevertheless, I isolated one network property (network size) and explored its relation to length of recall period. Of course, it is possible that length of the recall period affects other network properties as well. For example.
retrospectively reconstructed networks might be biased toward the most permanent and
typical kinds of alters (such as kin) in which case compositional measures may also be
affected in retrospective data. Once the magnitudes of any length-of-recall-period effects
have been ascertained, correction factors could be applied in retrospective analyses, as
necessary.

This research examines a wide array of network properties, yet there are still other
interesting network characteristics to be studied. For example, these data include race and
employment status of respondents' network alters. This makes it possible to address such
issues as whether parenthood is accompanied by shifts in the racial heterogeneity of social
networks, or whether involvement in the domestic sphere is related to the probability of
naming a homemaker as an alter. In order to construct a more nuanced explanation for
the findings reported here, it might also be useful to disaggregate frequency of contact and
geographic distance by alter type. These data could provide further clarifying details for
the results reported here by answering such questions as: Is parity related to frequency of
contact with friends? Are hours spent doing home chores related to frequency of contact
with neighbors? Do early parents live geographically closer to their alters than their
delayed counterparts? These data could also be used to flesh out the propinquity
hypothesis presented above as an explanation for certain ethnic differences in network
structure. In sum, while interesting questions remain unaddressed, the current dissertation
provides researchers with a firm foundation from which to launch future research on the
relationships between network properties and parenthood.
CHAPTER 8: TABLES

Table 3-1: A comparison of the study sample of parents with the general population of Pima County residents, ages 18-54

<table>
<thead>
<tr>
<th>Sex</th>
<th>Sample of Parents</th>
<th>General Population, Ages 18-54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>32.6%</td>
<td>49.8%</td>
</tr>
<tr>
<td>Females</td>
<td>67.4%</td>
<td>50.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity:</th>
<th>Sample of Parents</th>
<th>General Population, Ages 18-54</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanics</td>
<td>16.6%</td>
<td>23.7%</td>
</tr>
<tr>
<td>Non-Hispanics</td>
<td>83.2%</td>
<td>76.3%</td>
</tr>
</tbody>
</table>

N 368 354,217

* Data for the general population are from 1990 Census. This comparison is to be used only for illustrative purposes as the actual study population is unknown.
Table 4-1: Means and standard deviations for dependent variables in retrospective analyses, by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-parenthood Network Size</td>
<td>3.743</td>
<td>4.420*</td>
</tr>
<tr>
<td></td>
<td>(2.725)</td>
<td>(2.458)</td>
</tr>
<tr>
<td>ΔNetwork Size</td>
<td>-0.150</td>
<td>-0.128</td>
</tr>
<tr>
<td></td>
<td>(1.548)</td>
<td>(1.593)</td>
</tr>
<tr>
<td>Pre-parenthood Contact Volume</td>
<td>522.00</td>
<td>774.23***</td>
</tr>
<tr>
<td></td>
<td>(464.23)</td>
<td>(509.45)</td>
</tr>
<tr>
<td>Pre-parenthood Mean Contact Frequency</td>
<td>139.86</td>
<td>188.19***</td>
</tr>
<tr>
<td></td>
<td>(110.73)</td>
<td>(105.65)</td>
</tr>
<tr>
<td>ΔMean Contact Frequency</td>
<td>12.01</td>
<td>-0.60</td>
</tr>
<tr>
<td></td>
<td>(91.24)</td>
<td>(85.01)</td>
</tr>
<tr>
<td>Pre-parenthood Proportion Kin</td>
<td>0.636</td>
<td>0.702</td>
</tr>
<tr>
<td></td>
<td>(0.358)</td>
<td>(0.283)</td>
</tr>
<tr>
<td>ΔProportion Kin</td>
<td>-0.033</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.264)</td>
<td>(0.225)</td>
</tr>
<tr>
<td>Pre-parenthood Proportion Female</td>
<td>0.552</td>
<td>0.618*</td>
</tr>
<tr>
<td></td>
<td>(0.309)</td>
<td>(0.244)</td>
</tr>
<tr>
<td>ΔProportion Female</td>
<td>-0.017</td>
<td>-0.024</td>
</tr>
<tr>
<td></td>
<td>(0.244)</td>
<td>(0.175)</td>
</tr>
<tr>
<td>Pre-parenthood Proportion Friend</td>
<td>0.180</td>
<td>0.208</td>
</tr>
<tr>
<td></td>
<td>(0.266)</td>
<td>(0.246)</td>
</tr>
<tr>
<td>ΔProportion Friend</td>
<td>0.020</td>
<td>-0.010</td>
</tr>
<tr>
<td></td>
<td>(0.179)</td>
<td>(0.195)</td>
</tr>
<tr>
<td>Pre-parenthood Proportion Coworker</td>
<td>0.076</td>
<td>0.061</td>
</tr>
<tr>
<td></td>
<td>(0.159)</td>
<td>(0.117)</td>
</tr>
<tr>
<td>ΔProportion Coworker</td>
<td>-0.016</td>
<td>-0.028</td>
</tr>
<tr>
<td></td>
<td>(0.112)</td>
<td>(0.095)</td>
</tr>
<tr>
<td>Pre-birth Network Density</td>
<td>0.588</td>
<td>0.739***</td>
</tr>
<tr>
<td></td>
<td>(0.398)</td>
<td>(0.321)</td>
</tr>
<tr>
<td>ΔNetwork Density</td>
<td>-0.011</td>
<td>-0.035</td>
</tr>
<tr>
<td></td>
<td>(0.264)</td>
<td>(0.323)</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>
Table 4-2: Means and standard deviations for independent variables in retrospective analyses, by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transition Timing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>0.088</td>
<td>0.248***</td>
</tr>
<tr>
<td></td>
<td>(0.285)</td>
<td>(0.433)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.504</td>
<td>0.522</td>
</tr>
<tr>
<td></td>
<td>(0.502)</td>
<td>(0.501)</td>
</tr>
<tr>
<td>Delayed (30+)</td>
<td>0.417</td>
<td>0.243*</td>
</tr>
<tr>
<td></td>
<td>(0.495)</td>
<td>(0.430)</td>
</tr>
<tr>
<td><strong>Relationship Status at Birth of Oldest Child</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with Partner</td>
<td>0.027</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>(0.161)</td>
<td>(0.196)</td>
</tr>
<tr>
<td>Married, Lived Together First</td>
<td>0.451</td>
<td>0.478</td>
</tr>
<tr>
<td></td>
<td>(0.500)</td>
<td>(0.501)</td>
</tr>
<tr>
<td>Married, Did Not Live Together</td>
<td>0.460</td>
<td>0.345*</td>
</tr>
<tr>
<td></td>
<td>(0.501)</td>
<td>(0.476)</td>
</tr>
<tr>
<td>No Relationship at Time of Birth</td>
<td>0.070</td>
<td>0.135*</td>
</tr>
<tr>
<td></td>
<td>(0.256)</td>
<td>(0.342)</td>
</tr>
<tr>
<td><strong>Geographic Moves</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Move</td>
<td>0.088</td>
<td>0.164*</td>
</tr>
<tr>
<td></td>
<td>(0.285)</td>
<td>(0.371)</td>
</tr>
<tr>
<td>Non-local Move</td>
<td>0.106</td>
<td>0.106</td>
</tr>
<tr>
<td></td>
<td>(0.309)</td>
<td>(0.309)</td>
</tr>
<tr>
<td>No Move</td>
<td>0.805</td>
<td>0.730</td>
</tr>
<tr>
<td></td>
<td>(0.398)</td>
<td>(0.445)</td>
</tr>
<tr>
<td><strong>Gender Role Ideology</strong></td>
<td>14.301</td>
<td>15.106*</td>
</tr>
<tr>
<td></td>
<td>(2.796)</td>
<td>(2.719)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>0.142</td>
<td>0.164</td>
</tr>
<tr>
<td></td>
<td>(0.350)</td>
<td>(0.371)</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>
Table 4-3: Coefficients from the regression of network size just before the birth of the oldest child

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.132</td>
<td>6.083</td>
</tr>
<tr>
<td></td>
<td>(1.837)</td>
<td>(1.106)</td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>0.806</td>
<td>-1.695***</td>
</tr>
<tr>
<td></td>
<td>(1.165)</td>
<td>(0.518)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.006</td>
<td>-0.676*</td>
</tr>
<tr>
<td></td>
<td>(0.553)</td>
<td>(0.409)</td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relationship)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-3.519*</td>
<td>-1.029</td>
</tr>
<tr>
<td></td>
<td>(2.002)</td>
<td>(0.921)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.249</td>
<td>-0.710</td>
</tr>
<tr>
<td></td>
<td>(1.251)</td>
<td>(0.518)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-0.062</td>
<td>-1.001*</td>
</tr>
<tr>
<td></td>
<td>(1.284)</td>
<td>(0.557)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.103</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>0.558</td>
<td>-0.331</td>
</tr>
<tr>
<td></td>
<td>(0.750)</td>
<td>(0.460)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.049</td>
<td>0.061</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
$p<.10$  ***$p<.001$
Table 4-4: Coefficients from the regression of network size around the time of the oldest child's first birthday

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.493</td>
<td>4.643</td>
</tr>
<tr>
<td></td>
<td>(1.819)</td>
<td>(1.082)</td>
</tr>
<tr>
<td>Transition Timing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>0.407</td>
<td>-0.927*</td>
</tr>
<tr>
<td></td>
<td>(1.156)</td>
<td>(0.528)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.027</td>
<td>0.051</td>
</tr>
<tr>
<td></td>
<td>(0.559)</td>
<td>(0.405)</td>
</tr>
<tr>
<td>Relationship Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=No relationship)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-2.571</td>
<td>-1.361</td>
</tr>
<tr>
<td></td>
<td>(1.991)</td>
<td>(0.906)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.863</td>
<td>-0.660</td>
</tr>
<tr>
<td></td>
<td>(1.240)</td>
<td>(0.511)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>0.694</td>
<td>-0.833</td>
</tr>
<tr>
<td></td>
<td>(1.273)</td>
<td>(0.546)</td>
</tr>
<tr>
<td>Geographic Moves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=No move)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>0.513</td>
<td>0.184</td>
</tr>
<tr>
<td></td>
<td>(0.918)</td>
<td>(0.441)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>-0.565</td>
<td>-0.719</td>
</tr>
<tr>
<td></td>
<td>(0.867)</td>
<td>(0.542)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.100</td>
<td>0.046</td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td>(0.059)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>-0.029</td>
<td>-0.863*</td>
</tr>
<tr>
<td></td>
<td>(0.742)</td>
<td>(0.459)</td>
</tr>
<tr>
<td>R²</td>
<td>0.050</td>
<td>0.076</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
*p<.10
Table 4-5: Coefficients from the regression of the change in network size at the transition to parenthood

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.217</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>(1.002)</td>
<td>(0.719)</td>
</tr>
<tr>
<td>Transition Timing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-0.301</td>
<td>0.320</td>
</tr>
<tr>
<td></td>
<td>(0.634)</td>
<td>(0.336)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>-0.066</td>
<td>0.547*</td>
</tr>
<tr>
<td></td>
<td>(0.306)</td>
<td>(0.254)</td>
</tr>
<tr>
<td>Relationship Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=No relationship)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>0.488</td>
<td>-0.584</td>
</tr>
<tr>
<td></td>
<td>(1.107)</td>
<td>(0.566)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.643</td>
<td>-0.141</td>
</tr>
<tr>
<td></td>
<td>(0.679)</td>
<td>(0.320)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>0.816</td>
<td>-0.081</td>
</tr>
<tr>
<td></td>
<td>(0.697)</td>
<td>(0.342)</td>
</tr>
<tr>
<td>Geographic Moves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=No move)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>0.646</td>
<td>0.206</td>
</tr>
<tr>
<td></td>
<td>(0.502)</td>
<td>(0.275)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>0.123</td>
<td>-0.522</td>
</tr>
<tr>
<td></td>
<td>(0.476)</td>
<td>(0.338)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>-0.007</td>
<td>0.052</td>
</tr>
<tr>
<td></td>
<td>(0.055)</td>
<td>(0.037)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>-0.485</td>
<td>-0.579*</td>
</tr>
<tr>
<td></td>
<td>(0.407)</td>
<td>(0.286)</td>
</tr>
<tr>
<td>Pre-birth network size</td>
<td>-0.175**</td>
<td>-0.237***</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.041)</td>
</tr>
<tr>
<td>R²</td>
<td>0.161</td>
<td>0.182</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
*p<.05     **p<.01      ***p<.001
Table 4-6: Coefficients from the regression of contact volume just before the birth of the oldest child

<table>
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<tr>
<th>Independent Variables</th>
<th>Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-82.462</td>
</tr>
<tr>
<td>(141.636)</td>
<td></td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>236.401***</td>
</tr>
<tr>
<td>(69.195)</td>
<td></td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>87.760*</td>
</tr>
<tr>
<td>(48.505)</td>
<td></td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relationship)</td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-125.745</td>
</tr>
<tr>
<td>(126.282)</td>
<td></td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>-118.992</td>
</tr>
<tr>
<td>(72.617)</td>
<td></td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-149.682*</td>
</tr>
<tr>
<td>(76.733)</td>
<td></td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>12.969*</td>
</tr>
<tr>
<td>(7.644)</td>
<td></td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>227.879***</td>
</tr>
<tr>
<td>(58.402)</td>
<td></td>
</tr>
<tr>
<td>Pre-birth Network Size</td>
<td>119.537***</td>
</tr>
<tr>
<td>(8.170)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>104.222*</td>
</tr>
<tr>
<td>(45.820)</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.469</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>339</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors  
***p<.001  *p<.05  p<.10
Table 4-7: Coefficients from the regression of contact volume around the time of the oldest child's first birthday

<table>
<thead>
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<th>Independent Variables</th>
<th>Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
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</tr>
<tr>
<td></td>
<td>(135.746)</td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>169.204*</td>
</tr>
<tr>
<td></td>
<td>(66.888)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>72.508</td>
</tr>
<tr>
<td></td>
<td>(46.423)</td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relationship)</td>
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</tr>
<tr>
<td>Lived together</td>
<td>-56.960</td>
</tr>
<tr>
<td></td>
<td>(120.376)</td>
</tr>
<tr>
<td>Married. lived together first</td>
<td>-78.680</td>
</tr>
<tr>
<td></td>
<td>(69.352)</td>
</tr>
<tr>
<td>Married. did not live together</td>
<td>-119.843</td>
</tr>
<tr>
<td></td>
<td>(72.859)</td>
</tr>
<tr>
<td>Geographic Moves (Omitted Category=No move)</td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>-9.238</td>
</tr>
<tr>
<td></td>
<td>(57.602)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>-17.407</td>
</tr>
<tr>
<td></td>
<td>(65.809)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>10.695</td>
</tr>
<tr>
<td></td>
<td>(7.277)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>185.837***</td>
</tr>
<tr>
<td></td>
<td>(56.091)</td>
</tr>
<tr>
<td>Post-birth network size</td>
<td>103.435***</td>
</tr>
<tr>
<td></td>
<td>(12.678)</td>
</tr>
<tr>
<td>Female</td>
<td>-7.110</td>
</tr>
<tr>
<td></td>
<td>(76.416)</td>
</tr>
<tr>
<td>Female X post-birth network size</td>
<td>26.694-</td>
</tr>
<tr>
<td></td>
<td>(16.162)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.467</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>339</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

***p<.001    *p<.05    p<.10
Table 4-8: Coefficients from the regression of the change in mean contact frequency at the transition to parenthood

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>9.310</td>
</tr>
<tr>
<td></td>
<td>(31.689)</td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-34.991*</td>
</tr>
<tr>
<td></td>
<td>(16.219)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>-8.420</td>
</tr>
<tr>
<td></td>
<td>(11.342)</td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relationship)</td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>43.678</td>
</tr>
<tr>
<td></td>
<td>(29.244)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>2.510</td>
</tr>
<tr>
<td></td>
<td>(16.873)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>6.669</td>
</tr>
<tr>
<td></td>
<td>(17.709)</td>
</tr>
<tr>
<td>Geographic Moves (Omitted Category=No move)</td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>2.947</td>
</tr>
<tr>
<td></td>
<td>(14.068)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>23.853</td>
</tr>
<tr>
<td></td>
<td>(16.030)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.113</td>
</tr>
<tr>
<td></td>
<td>(1.775)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>1.948</td>
</tr>
<tr>
<td></td>
<td>(13.626)</td>
</tr>
<tr>
<td>Female</td>
<td>-7.120</td>
</tr>
<tr>
<td></td>
<td>(10.538)</td>
</tr>
<tr>
<td>R²</td>
<td>0.033</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>339</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
*p<.05
Table 4-9: Coefficients from the regression of proportion kin just before the birth of the oldest child

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.591</td>
<td>0.620</td>
</tr>
<tr>
<td></td>
<td>(0.233)</td>
<td>(0.136)</td>
</tr>
<tr>
<td>Transition Timing <em>(Omitted Category=Delayed)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-0.006</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td>(0.061)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.041</td>
<td>0.110*</td>
</tr>
<tr>
<td></td>
<td>(0.070)</td>
<td>(0.047)</td>
</tr>
<tr>
<td>Relationship Status <em>(Omitted Category=No relationship)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-0.285</td>
<td>-0.057</td>
</tr>
<tr>
<td></td>
<td>(0.256)</td>
<td>(0.106)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>-0.017</td>
<td>0.043</td>
</tr>
<tr>
<td></td>
<td>(0.158)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-0.123</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.162)</td>
<td>(0.065)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.000</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>0.253**</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>(0.095)</td>
<td>(0.053)</td>
</tr>
<tr>
<td>Pre-birth network size</td>
<td>0.016</td>
<td>-0.019*</td>
</tr>
<tr>
<td></td>
<td>(0.012)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.132</td>
<td>0.069</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

**p<.01  *p<.05  p<.10
Table 4-10: Coefficients from the regression of proportion kin around the time of the oldest child's first birthday

<table>
<thead>
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<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.221</td>
<td>0.599</td>
</tr>
<tr>
<td></td>
<td>(0.247)</td>
<td>(0.130)</td>
</tr>
<tr>
<td>Transition Timing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-0.008</td>
<td>-0.051</td>
</tr>
<tr>
<td></td>
<td>(0.156)</td>
<td>(0.062)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.054</td>
<td>0.070</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.047)</td>
</tr>
<tr>
<td>Relationship Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=No relationship)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-0.085</td>
<td>0.065</td>
</tr>
<tr>
<td></td>
<td>(0.272)</td>
<td>(0.105)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.128</td>
<td>0.092</td>
</tr>
<tr>
<td></td>
<td>(0.168)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>0.104</td>
<td>0.058</td>
</tr>
<tr>
<td></td>
<td>(0.172)</td>
<td>(0.064)</td>
</tr>
<tr>
<td>Geographic Moves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omitted Category=No move)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>0.095</td>
<td>0.129</td>
</tr>
<tr>
<td></td>
<td>(0.124)</td>
<td>(0.063)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>-0.040</td>
<td>-0.016*</td>
</tr>
<tr>
<td></td>
<td>(0.117)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.009</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>0.278**</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>Post-birth network size</td>
<td>0.022*</td>
<td>-0.016*</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.130</td>
<td>0.088</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

**p<.01  *p<.05  ¤p<.10
Table 4-11: Coefficients from the regression of the change in proportion kin at the transition to parenthood.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.379</td>
<td>-0.079</td>
</tr>
<tr>
<td></td>
<td>(0.176)</td>
<td>(0.109)</td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-0.013</td>
<td>-0.060</td>
</tr>
<tr>
<td></td>
<td>(0.111)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.006</td>
<td>-0.036</td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
<td>(0.038)</td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relationship)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>0.237</td>
<td>0.132</td>
</tr>
<tr>
<td></td>
<td>(0.194)</td>
<td>(0.085)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.157</td>
<td>0.058</td>
</tr>
<tr>
<td></td>
<td>(0.119)</td>
<td>(0.049)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>0.250*</td>
<td>0.077</td>
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<tr>
<td></td>
<td>(0.122)</td>
<td>(0.052)</td>
</tr>
<tr>
<td>Geographic Moves (Omitted Category=No move)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>0.135</td>
<td>-0.022</td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
<td>(0.041)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>0.008</td>
<td>0.094*</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.008</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>0.014</td>
<td>0.015</td>
</tr>
<tr>
<td></td>
<td>(0.071)</td>
<td>(0.043)</td>
</tr>
<tr>
<td>Pre-birth network size</td>
<td>0.007</td>
<td>0.015*</td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>R²</td>
<td>0.112</td>
<td>0.074</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
*p<.05    *p<.10
Table 4-12: Coefficients from the regression of proportion female just before the birth of the oldest child

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.358</td>
<td>0.200</td>
</tr>
<tr>
<td></td>
<td>(0.200)</td>
<td>(0.110)</td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (≤21)</td>
<td>-0.094</td>
<td>0.132**</td>
</tr>
<tr>
<td></td>
<td>(0.126)</td>
<td>(0.050)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.005</td>
<td>0.089*</td>
</tr>
<tr>
<td></td>
<td>(0.060)</td>
<td>(0.038)</td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relationship)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-0.491*</td>
<td>0.233**</td>
</tr>
<tr>
<td></td>
<td>(0.219)</td>
<td>(0.086)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>-0.137</td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td>(0.135)</td>
<td>(0.049)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-0.224</td>
<td>0.055</td>
</tr>
<tr>
<td></td>
<td>(0.138)</td>
<td>(0.053)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.023*</td>
<td>0.012*</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>0.179*</td>
<td>-0.133**</td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
<td>(0.043)</td>
</tr>
<tr>
<td>Pre-birth network size</td>
<td>0.008</td>
<td>0.032***</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.143</td>
<td>0.190</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>224</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

***p<.001    **p<.01    *p<.05    p<.10
Table 4-13: Coefficients from the regression of proportion female around the time of the oldest child's first birthday

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.095</td>
<td>0.305</td>
</tr>
<tr>
<td>(0.215)</td>
<td>(0.110)</td>
<td></td>
</tr>
<tr>
<td><strong>Transition Timing (Omitted Category=Delayed)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;=21)</td>
<td>-0.099</td>
<td>0.105*</td>
</tr>
<tr>
<td>(0.136)</td>
<td>(0.052)</td>
<td></td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.022</td>
<td>0.104**</td>
</tr>
<tr>
<td>(0.066)</td>
<td>(0.039)</td>
<td></td>
</tr>
<tr>
<td><strong>Relationship Status (Omitted Category=No relationship)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-0.300</td>
<td>0.193*</td>
</tr>
<tr>
<td>(0.237)</td>
<td>(0.089)</td>
<td></td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.024</td>
<td>0.009</td>
</tr>
<tr>
<td>(0.146)</td>
<td>(0.051)</td>
<td></td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-0.027</td>
<td>0.058</td>
</tr>
<tr>
<td>(0.150)</td>
<td>(0.054)</td>
<td></td>
</tr>
<tr>
<td><strong>Geographic Moves (Omitted Category=No move)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>0.018</td>
<td>0.018</td>
</tr>
<tr>
<td>(0.108)</td>
<td>(0.043)</td>
<td></td>
</tr>
<tr>
<td>Non-local move</td>
<td>0.006</td>
<td>-0.066</td>
</tr>
<tr>
<td>(0.102)</td>
<td>(0.053)</td>
<td></td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.026*</td>
<td>0.004</td>
</tr>
<tr>
<td>(0.012)</td>
<td>(0.006)</td>
<td></td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>0.161*</td>
<td>-0.131**</td>
</tr>
<tr>
<td>(0.087)</td>
<td>(0.046)</td>
<td></td>
</tr>
<tr>
<td>Post-birth network size</td>
<td>0.014</td>
<td>0.016***</td>
</tr>
<tr>
<td>(0.012)</td>
<td>(0.007)</td>
<td></td>
</tr>
<tr>
<td>R^2</td>
<td>0.131</td>
<td>0.191</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>224</td>
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</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
***p<.001 **p<.01 *p<.05 p<.10
Table 4-14: Coefficients from the regression of proportion friend just before the birth of the oldest child

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men and Women</th>
<th>Intercept</th>
<th>Transition Timing (Omitted Category=Delayed)</th>
<th>Relationship Status (Omitted Category=No relationship)</th>
<th>Gender role ideology</th>
<th>Hispanic ethnicity</th>
<th>Pre-birth network size</th>
<th>Female</th>
<th>R²</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Early (&lt;21)</td>
<td>On-time (21-30)</td>
<td>Lived together</td>
<td>Married, lived together first</td>
<td>Married, did not live together</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.206</td>
<td>-0.021</td>
<td>-0.049</td>
<td>-0.029</td>
<td>-0.092</td>
<td>-0.069</td>
<td></td>
<td></td>
<td>337</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.091)</td>
<td>(0.045)</td>
<td>(0.031)</td>
<td>(0.081)</td>
<td>(0.047)</td>
<td>(0.050)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

***p<.001    **p<.01    p<.10
Table 4-15: Coefficients from the regression of proportion friend around
the time of the oldest child's first birthday

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.246</td>
</tr>
<tr>
<td></td>
<td>(0.087)</td>
</tr>
<tr>
<td>Transition Timing (Ommitted Category=Delayed))</td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-0.199*</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>-0.061*</td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
</tr>
<tr>
<td>Relationship Status (Ommitted Category=No relationship))</td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-0.014</td>
</tr>
<tr>
<td></td>
<td>(0.079)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>-0.085-</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-0.092-</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
</tr>
<tr>
<td>Geographic Moves (Ommitted Category=No move))</td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>0.041</td>
</tr>
<tr>
<td></td>
<td>(0.038)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>-0.055</td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>-0.131***</td>
</tr>
<tr>
<td></td>
<td>(0.037)</td>
</tr>
<tr>
<td>Post-birth network size</td>
<td>0.030***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>Female</td>
<td>-0.045</td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
</tr>
<tr>
<td>Female X Early Parenthood</td>
<td>0.189*</td>
</tr>
<tr>
<td></td>
<td>(0.087)</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.175</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>337</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
***p<.001    *p<.05      p<.10
Table 4-16: Coefficients from the regression of proportion coworker just before the birth of the oldest child

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.145</td>
<td>0.077</td>
</tr>
<tr>
<td>(0.104)</td>
<td>(0.056)</td>
<td></td>
</tr>
<tr>
<td><em>Transition Timing (Omitted Category=Delayed)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>0.171*</td>
<td>-0.046*</td>
</tr>
<tr>
<td>(0.066)</td>
<td>(0.025)</td>
<td></td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.011</td>
<td>-0.023</td>
</tr>
<tr>
<td>(0.031)</td>
<td>(0.019)</td>
<td></td>
</tr>
<tr>
<td><em>Relationship Status (Omitted Category=No relationship)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-0.165</td>
<td>0.035</td>
</tr>
<tr>
<td>(0.114)</td>
<td>(0.044)</td>
<td></td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.064</td>
<td>-0.007</td>
</tr>
<tr>
<td>(0.070)</td>
<td>(0.025)</td>
<td></td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>0.019</td>
<td>-0.004</td>
</tr>
<tr>
<td>(0.072)</td>
<td>(0.027)</td>
<td></td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.010*</td>
<td>-0.002</td>
</tr>
<tr>
<td>(0.006)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>-0.042</td>
<td>-0.023</td>
</tr>
<tr>
<td>(0.042)</td>
<td>(0.022)</td>
<td></td>
</tr>
<tr>
<td>Pre-birth network size</td>
<td>0.007</td>
<td>0.009**</td>
</tr>
<tr>
<td>(0.005)</td>
<td>(0.003)</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.131</td>
<td>0.083</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>224</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

**p<.01  *p<.05  ^p<.10
Table 4-17: Coefficients from the regression of proportion coworker around the time of the oldest child's first birthday

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.047</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>(0.098)</td>
<td>(0.044)</td>
</tr>
<tr>
<td><strong>Transition Timing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Omitted Category=Delayed)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (<strong>&lt;21</strong>)</td>
<td>0.143*</td>
<td>-0.020</td>
</tr>
<tr>
<td></td>
<td>(0.062)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>On-time (<strong>21-30</strong>)</td>
<td>0.005</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
<td>(0.016)</td>
</tr>
<tr>
<td><strong>Relationship Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Omitted Category=No relationship)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-0.190*</td>
<td>-0.035</td>
</tr>
<tr>
<td></td>
<td>(0.108)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>-0.039</td>
<td>-0.009</td>
</tr>
<tr>
<td></td>
<td>(0.067)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-0.060</td>
<td>-0.018</td>
</tr>
<tr>
<td></td>
<td>(0.068)</td>
<td>(0.021)</td>
</tr>
<tr>
<td><strong>Geographic Moves</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Omitted Category=No move)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>-0.064</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(0.049)</td>
<td>(0.017)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>0.036</td>
<td>-0.027</td>
</tr>
<tr>
<td></td>
<td>(0.047)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>-0.073*</td>
<td>-0.009</td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>Pre-birth network size</td>
<td>0.009</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>R²</td>
<td>0.158</td>
<td>0.054</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>224</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
*p<0.05    "p<0.10
Table 4-18: Coefficients from the regression of the change in proportion coworker at the transition to parenthood

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.200</td>
<td>-0.057</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td>(0.045)</td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-0.023</td>
<td>0.018</td>
</tr>
<tr>
<td></td>
<td>(0.047)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>-0.003</td>
<td>0.015</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relationship)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>-0.039</td>
<td>-0.073*</td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td>(0.036)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>-0.098*</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-0.075</td>
<td>0.017</td>
</tr>
<tr>
<td></td>
<td>(0.052)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>Geographic Moves (Omitted Category=No move)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>-0.024</td>
<td>0.027</td>
</tr>
<tr>
<td></td>
<td>(0.038)</td>
<td>(0.017)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>0.015</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(0.036)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>-0.008*</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>-0.032</td>
<td>0.015</td>
</tr>
<tr>
<td></td>
<td>(0.031)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>Pre-birth network size</td>
<td>-0.004</td>
<td>-0.007**</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.108</td>
<td>0.095</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>113</td>
<td>226</td>
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</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

**p<.01  *p<.05  p<.10
Table 4-19: Coefficients from the regression of network density just before the birth of the oldest child.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.368</td>
<td>0.385</td>
</tr>
<tr>
<td></td>
<td>(0.241)</td>
<td>(0.157)</td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>0.042</td>
<td>0.213**</td>
</tr>
<tr>
<td></td>
<td>(0.151)</td>
<td>(0.071)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.046</td>
<td>0.172**</td>
</tr>
<tr>
<td></td>
<td>(0.073)</td>
<td>(0.055)</td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>0.196</td>
<td>-0.039</td>
</tr>
<tr>
<td></td>
<td>(0.262)</td>
<td>(0.122)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.198</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(0.161)</td>
<td>(0.071)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>0.153</td>
<td>0.056</td>
</tr>
<tr>
<td></td>
<td>(0.166)</td>
<td>(0.076)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>-0.016</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>0.003</td>
<td>-0.107*</td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td>(0.063)</td>
</tr>
<tr>
<td>Pre-birth network size</td>
<td>0.071***</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>R²</td>
<td>0.165</td>
<td>0.073</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>108</td>
<td>213</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

***p<.001   **p<.01   *p<.05   p<.10
Table 4-20: Coefficients from the regression of network density around the time of the oldest child's first birthday

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.434</td>
<td>0.302</td>
</tr>
<tr>
<td></td>
<td>(0.243)</td>
<td>(0.159)</td>
</tr>
<tr>
<td>Transition Timing (Omitted Category=Delayed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-0.150</td>
<td>0.105</td>
</tr>
<tr>
<td></td>
<td>(0.153)</td>
<td>(0.076)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>0.032</td>
<td>0.116**</td>
</tr>
<tr>
<td></td>
<td>(0.076)</td>
<td>(0.058)</td>
</tr>
<tr>
<td>Relationship Status (Omitted Category=No relationship)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived together</td>
<td>0.112</td>
<td>0.206</td>
</tr>
<tr>
<td></td>
<td>(0.265)</td>
<td>(0.128)</td>
</tr>
<tr>
<td>Married, lived together first</td>
<td>0.004</td>
<td>0.063</td>
</tr>
<tr>
<td></td>
<td>(0.163)</td>
<td>(0.074)</td>
</tr>
<tr>
<td>Married, did not live together</td>
<td>-0.012</td>
<td>0.073</td>
</tr>
<tr>
<td></td>
<td>(0.169)</td>
<td>(0.079)</td>
</tr>
<tr>
<td>Geographic Moves (Omitted Category=No move)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>0.212*</td>
<td>0.037</td>
</tr>
<tr>
<td></td>
<td>(0.121)</td>
<td>(0.063)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>0.022</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(0.114)</td>
<td>(0.076)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>-0.011</td>
<td>0.011</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Hispanic ethnicity</td>
<td>0.092</td>
<td>-0.099</td>
</tr>
<tr>
<td></td>
<td>(0.101)</td>
<td>(0.068)</td>
</tr>
<tr>
<td>Post-birth network size</td>
<td>0.075***</td>
<td>-0.022**</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.298</td>
<td>0.079</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>108</td>
<td>213</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

**p<.10  *p<.10
Table 5-1: Means and standard deviations for dependent variables in cross-sectional analyses, by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Size</td>
<td>3.798</td>
<td>4.713*</td>
</tr>
<tr>
<td></td>
<td>(3.530)</td>
<td>(2.783)</td>
</tr>
<tr>
<td>Contact Volume</td>
<td>494.53</td>
<td>782.00***</td>
</tr>
<tr>
<td></td>
<td>(428.98)</td>
<td>(530.94)</td>
</tr>
<tr>
<td>Mean Contact Frequency</td>
<td>140.58</td>
<td>185.09**</td>
</tr>
<tr>
<td></td>
<td>(124.14)</td>
<td>(110.97)</td>
</tr>
<tr>
<td>Proportion Kin</td>
<td>0.606</td>
<td>0.659</td>
</tr>
<tr>
<td></td>
<td>(0.403)</td>
<td>(0.297)</td>
</tr>
<tr>
<td>Proportion Female</td>
<td>0.517</td>
<td>0.557</td>
</tr>
<tr>
<td></td>
<td>(0.340)</td>
<td>(0.258)</td>
</tr>
<tr>
<td>Proportion Friend</td>
<td>0.167</td>
<td>0.250**</td>
</tr>
<tr>
<td></td>
<td>(0.285)</td>
<td>(0.260)</td>
</tr>
<tr>
<td>Proportion Coworker</td>
<td>0.062</td>
<td>0.039+</td>
</tr>
<tr>
<td></td>
<td>(0.130)</td>
<td>(0.104)</td>
</tr>
<tr>
<td>Proportion Neighbor</td>
<td>0.010</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>(0.052)</td>
<td>(0.044)</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>109</td>
<td>223</td>
</tr>
</tbody>
</table>
Table 5-2: Means and standard deviations for independent variables in cross-sectional analyses, by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age</td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>36.844(7.061)</td>
<td>33.623*** (7.110)</td>
</tr>
<tr>
<td>Education ((I=post-secondary))</td>
<td>0.789(0.410)</td>
<td>0.632** (0.483)</td>
</tr>
<tr>
<td>Employment Status ((I=full- or part-time))</td>
<td>0.982(0.135)</td>
<td>0.789*** (0.409)</td>
</tr>
<tr>
<td>Ethnicity ((I=Hispanic))</td>
<td>0.147(0.356)</td>
<td>0.152 (0.360)</td>
</tr>
<tr>
<td>Recent Geographic Move</td>
<td>0.101(0.303)</td>
<td>0.108 (0.312)</td>
</tr>
<tr>
<td>Religion: Traditional</td>
<td>0.633(0.484)</td>
<td>0.704 (0.458)</td>
</tr>
<tr>
<td>Other Christian</td>
<td>0.092 (0.290)</td>
<td>0.135 (0.342)</td>
</tr>
<tr>
<td>Single Relationship Status</td>
<td>0.064(0.246)</td>
<td>0.242*** (0.429)</td>
</tr>
<tr>
<td><strong>Parenting Context Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of Youngest Child at Home ((in months))</td>
<td>48.771(36.769)</td>
<td>53.848 (40.006)</td>
</tr>
<tr>
<td>Number of Children at Home</td>
<td>1.936(0.946)</td>
<td>1.843 (1.003)</td>
</tr>
<tr>
<td>Paid Child Care ((I=uses))</td>
<td>0.477 (0.502)</td>
<td>0.614* (0.488)</td>
</tr>
<tr>
<td>Daily Hours with Children</td>
<td>6.899(3.739)</td>
<td>9.399*** (4.268)</td>
</tr>
<tr>
<td>Daily Hours doing Chores</td>
<td>5.191 (2.782)</td>
<td>5.738 (3.037)</td>
</tr>
<tr>
<td>Household Power</td>
<td>0.294(0.975)</td>
<td>0.548* (1.243)</td>
</tr>
<tr>
<td>Gender Role Ideology</td>
<td>14.321 (2.870)</td>
<td>15.242** (2.664)</td>
</tr>
</tbody>
</table>
Table 5-3: Coefficients from the regression of network size

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>11.973</td>
<td>2.535</td>
</tr>
<tr>
<td></td>
<td>(8.200)</td>
<td>(3.758)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.641</td>
<td>0.082</td>
</tr>
<tr>
<td></td>
<td>(0.415)</td>
<td>(0.212)</td>
</tr>
<tr>
<td>Age^2 (in thousandths)</td>
<td>8.323</td>
<td>-1.918</td>
</tr>
<tr>
<td></td>
<td>(5.411)</td>
<td>(3.015)</td>
</tr>
<tr>
<td>Education</td>
<td>0.595</td>
<td>1.267**</td>
</tr>
<tr>
<td></td>
<td>(0.900)</td>
<td>(0.406)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>2.320</td>
<td>-0.350</td>
</tr>
<tr>
<td></td>
<td>(2.601)</td>
<td>(0.460)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>0.341</td>
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</tr>
<tr>
<td></td>
<td>(1.018)</td>
<td>(0.538)</td>
</tr>
<tr>
<td>Recent Move</td>
<td>1.182</td>
<td>0.380</td>
</tr>
<tr>
<td></td>
<td>(1.200)</td>
<td>(0.621)</td>
</tr>
<tr>
<td>Religion (omitted category=no religion)</td>
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<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>1.629*</td>
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</tr>
<tr>
<td>(Catholic Jewish or Protestant)</td>
<td>(0.797)</td>
<td>(0.517)</td>
</tr>
<tr>
<td>Other Christian</td>
<td>-0.087</td>
<td>0.953</td>
</tr>
<tr>
<td></td>
<td>(1.349)</td>
<td>(0.700)</td>
</tr>
<tr>
<td>Single Relationship Status</td>
<td>-1.490</td>
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</tr>
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<td>(1.531)</td>
<td>(0.436)</td>
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<td>Number of Children at Home</td>
<td>0.512</td>
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<tr>
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<td>(0.197)</td>
</tr>
<tr>
<td>Daily Hours with Children</td>
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</tr>
<tr>
<td></td>
<td>(0.093)</td>
<td>(0.046)</td>
</tr>
<tr>
<td>R^2</td>
<td>0.138</td>
<td>0.094</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>109</td>
<td>223</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
**p<.01     *p<.05 p<.10
Table 5-4: Coefficients from the regression of contact volume

<table>
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<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Intercept</td>
<td>Intercept</td>
</tr>
<tr>
<td></td>
<td>958.24</td>
<td>1183.82</td>
</tr>
<tr>
<td></td>
<td>(737.50)</td>
<td>(540.01)</td>
</tr>
<tr>
<td>Age</td>
<td>-62.00</td>
<td>-41.85</td>
</tr>
<tr>
<td></td>
<td>(37.36)</td>
<td>(31.24)</td>
</tr>
<tr>
<td>Age² (in hundredths)</td>
<td>86.38</td>
<td>39.31</td>
</tr>
<tr>
<td></td>
<td>(48.82)</td>
<td>(44.88)</td>
</tr>
<tr>
<td>Education</td>
<td>9.78</td>
<td>43.15</td>
</tr>
<tr>
<td></td>
<td>(80.01)</td>
<td>(62.07)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>253.53</td>
<td>135.56+</td>
</tr>
<tr>
<td></td>
<td>(235.17)</td>
<td>(71.69)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>157.59+</td>
<td>301.08***</td>
</tr>
<tr>
<td></td>
<td>(92.00)</td>
<td>(82.23)</td>
</tr>
<tr>
<td>Recent Move</td>
<td>57.42</td>
<td>-177.10+</td>
</tr>
<tr>
<td></td>
<td>(109.02)</td>
<td>(94.02)</td>
</tr>
<tr>
<td>Religion (omitted category=no religion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>-4.28</td>
<td>-53.76</td>
</tr>
<tr>
<td></td>
<td>(72.82)</td>
<td>(78.69)</td>
</tr>
<tr>
<td>(Catholic Jewish or Protestant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Christian</td>
<td>53.97</td>
<td>-123.25</td>
</tr>
<tr>
<td></td>
<td>(121.09)</td>
<td>(105.81)</td>
</tr>
<tr>
<td>Single Relationship Status</td>
<td>-51.78</td>
<td>-6.16</td>
</tr>
<tr>
<td></td>
<td>(135.09)</td>
<td>(66.40)</td>
</tr>
<tr>
<td>Paid Child Care</td>
<td>25.33</td>
<td>-140.59*</td>
</tr>
<tr>
<td></td>
<td>(61.92)</td>
<td>(59.17)</td>
</tr>
<tr>
<td>Network Size</td>
<td>81.30***</td>
<td>110.96***</td>
</tr>
<tr>
<td></td>
<td>(9.01)</td>
<td>(10.39)</td>
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<tr>
<td>R²</td>
<td>0.524</td>
<td>0.422</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>109</td>
<td>223</td>
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</table>

Note: Numbers in Parentheses are Standard Errors
***p<.001      *p<.05      p<.10
Table 5-5: Coefficients from the regression of women's contact volume

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1185.33</td>
<td>(538.19)</td>
</tr>
<tr>
<td>Age</td>
<td>-41.38</td>
<td>(31.14)</td>
</tr>
<tr>
<td>Age² (in hundredths)</td>
<td>39.03</td>
<td>(44.73)</td>
</tr>
<tr>
<td>Education</td>
<td>36.70</td>
<td>(62.00)</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>full-time</td>
<td>168.43*</td>
<td>(74.49)</td>
</tr>
<tr>
<td>part-time</td>
<td>60.31</td>
<td>(86.21)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>297.43***</td>
<td>(81.99)</td>
</tr>
<tr>
<td>Recent Move</td>
<td>-167.48+</td>
<td>(93.90)</td>
</tr>
<tr>
<td>Religion (omitted category=no religion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>-59.78</td>
<td>(78.52)</td>
</tr>
<tr>
<td>(Catholic Jewish or Protestant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Christian</td>
<td>-130.09</td>
<td>(105.54)</td>
</tr>
<tr>
<td>Single Relationship Status</td>
<td>-12.76</td>
<td>(66.31)</td>
</tr>
<tr>
<td>Paid Child Care</td>
<td>-146.91*</td>
<td>(59.11)</td>
</tr>
<tr>
<td>Network Size</td>
<td>110.64***</td>
<td>(10.36)</td>
</tr>
<tr>
<td>R²</td>
<td>0.429</td>
<td></td>
</tr>
<tr>
<td>Number of Cases</td>
<td>223</td>
<td></td>
</tr>
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</table>

Note: Numbers in Parentheses are Standard Errors

***p<.001  **p<.01  *p<.05  p<.10
Table 5-6: Coefficients from the regression of mean contact frequency

<table>
<thead>
<tr>
<th>Independent Variables</th>
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<th>Women</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>193.08</td>
<td>432.61</td>
</tr>
<tr>
<td></td>
<td>(290.73)</td>
<td>(140.32)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-12.48</td>
<td>-10.88</td>
</tr>
<tr>
<td></td>
<td>(14.72)</td>
<td>(8.12)</td>
</tr>
<tr>
<td>Age</td>
<td>18.03</td>
<td>13.41</td>
</tr>
<tr>
<td></td>
<td>(19.23)</td>
<td>(11.64)</td>
</tr>
<tr>
<td>Age^2 (in hundredths)</td>
<td>7.86</td>
<td>-28.21+</td>
</tr>
<tr>
<td></td>
<td>(31.66)</td>
<td>(15.84)</td>
</tr>
<tr>
<td>Education</td>
<td>101.71</td>
<td>2.59</td>
</tr>
<tr>
<td></td>
<td>(93.09)</td>
<td>(18.60)</td>
</tr>
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<td>Employment Status</td>
<td>25.58</td>
<td>48.50*</td>
</tr>
<tr>
<td></td>
<td>(36.50)</td>
<td>(21.32)</td>
</tr>
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<td>Hispanic Ethnicity</td>
<td>42.73</td>
<td>-36.26</td>
</tr>
<tr>
<td></td>
<td>(43.15)</td>
<td>(24.42)</td>
</tr>
<tr>
<td>Religion (omitted category=no religion)</td>
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<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>25.60</td>
<td>-10.40</td>
</tr>
<tr>
<td></td>
<td>(28.35)</td>
<td>(20.45)</td>
</tr>
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<td>Other Christian</td>
<td>61.16</td>
<td>-35.66</td>
</tr>
<tr>
<td></td>
<td>(48.07)</td>
<td>(24.42)</td>
</tr>
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<td>Single Relationship Status</td>
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<td>-9.03</td>
</tr>
<tr>
<td></td>
<td>(53.22)</td>
<td>(17.27)</td>
</tr>
<tr>
<td>Paid Child Care</td>
<td>43.30+</td>
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</tr>
<tr>
<td></td>
<td>(24.44)</td>
<td>(15.39)</td>
</tr>
<tr>
<td>R^2</td>
<td>0.095</td>
<td>0.101</td>
</tr>
<tr>
<td>Number of Cases</td>
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<td>223</td>
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</table>

Note: Numbers in Parentheses are Standard Errors
*p<.05  *p<.10
Table 5-7: Coefficients from the regression of proportion kin

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<tr>
<th>Independent Variables</th>
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<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.496</td>
<td>1.392</td>
</tr>
<tr>
<td></td>
<td>(0.956)</td>
<td>(0.388)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.040</td>
<td>-0.029</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>Age$^2$ (in thousandths)</td>
<td>0.567</td>
<td>0.367</td>
</tr>
<tr>
<td></td>
<td>(0.626)</td>
<td>(0.307)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.161</td>
<td>-0.013</td>
</tr>
<tr>
<td></td>
<td>(0.107)</td>
<td>(0.042)</td>
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<tr>
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<td>(0.310)</td>
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<tr>
<td></td>
<td>(0.124)</td>
<td>(0.057)</td>
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<tr>
<td>Recent Move</td>
<td>0.124</td>
<td>-0.058</td>
</tr>
<tr>
<td></td>
<td>(0.144)</td>
<td>(0.064)</td>
</tr>
<tr>
<td><em>Religion</em> (omitted category=no religion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>0.092</td>
<td>0.068</td>
</tr>
<tr>
<td>(Catholic Jewish or Protestant)</td>
<td>(0.094)</td>
<td>(0.054)</td>
</tr>
<tr>
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<td>0.123</td>
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<tr>
<td></td>
<td>(0.162)</td>
<td>(0.072)</td>
</tr>
<tr>
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<td>-0.247</td>
<td>-0.175***</td>
</tr>
<tr>
<td></td>
<td>(0.179)</td>
<td>(0.046)</td>
</tr>
<tr>
<td>Age of Youngest Child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1</td>
<td>0.228+</td>
<td>-0.035</td>
</tr>
<tr>
<td></td>
<td>(0.134)</td>
<td>(0.075)</td>
</tr>
<tr>
<td>1-2</td>
<td>0.024</td>
<td>0.027</td>
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<tr>
<td></td>
<td>(0.139)</td>
<td>(0.071)</td>
</tr>
<tr>
<td>2-3</td>
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<td>-0.148+</td>
</tr>
<tr>
<td></td>
<td>(0.155)</td>
<td>(0.076)</td>
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</table>

(Note: table continued on following page)
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<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
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<tr>
<td>Age of Youngest Child</td>
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<td></td>
</tr>
<tr>
<td>3-4</td>
<td>0.083</td>
<td>0.027</td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td>(0.077)</td>
</tr>
<tr>
<td>4-5</td>
<td>0.211</td>
<td>0.131</td>
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<tr>
<td></td>
<td>(0.175)</td>
<td>(0.081)</td>
</tr>
<tr>
<td>5-6</td>
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<td>-0.156*</td>
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<tr>
<td></td>
<td>(0.160)</td>
<td>(0.078)</td>
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<tr>
<td>6-7</td>
<td>0.251</td>
<td>0.031</td>
</tr>
<tr>
<td></td>
<td>(0.165)</td>
<td>(0.080)</td>
</tr>
<tr>
<td>Network Size</td>
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<td>-0.030***</td>
</tr>
<tr>
<td></td>
<td>(0.012)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>R²</td>
<td>0.188</td>
<td>0.196</td>
</tr>
<tr>
<td>Number of Cases</td>
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<td>223</td>
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</table>

Note: Numbers in Parentheses are Standard Errors

***p<.001    *p<.05    p<.10
<table>
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<th>Men and Women</th>
</tr>
</thead>
<tbody>
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<td>Intercept</td>
<td>-0.316</td>
</tr>
<tr>
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<td>(0.263)</td>
</tr>
<tr>
<td>Sex (1=female)</td>
<td>0.059+</td>
</tr>
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<td>(0.032)</td>
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<tr>
<td>Age</td>
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</tr>
<tr>
<td></td>
<td>(0.014)</td>
</tr>
<tr>
<td>Age² (in thousandths)</td>
<td>-0.184</td>
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<tr>
<td></td>
<td>(0.200)</td>
</tr>
<tr>
<td>Education</td>
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<tr>
<td></td>
<td>(0.031)</td>
</tr>
<tr>
<td>Employment Status</td>
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<tr>
<td></td>
<td>(0.040)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>-0.098*</td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
</tr>
<tr>
<td>Recent Move</td>
<td>0.021</td>
</tr>
<tr>
<td></td>
<td>(0.046)</td>
</tr>
<tr>
<td>Religion (omitted category=no religion)</td>
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</tr>
<tr>
<td></td>
<td>(0.035)</td>
</tr>
<tr>
<td>Traditional</td>
<td></td>
</tr>
<tr>
<td>(Catholic Jewish or Protestant)</td>
<td></td>
</tr>
<tr>
<td>Other Christian</td>
<td>0.061</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
</tr>
<tr>
<td>Single Relationship Status</td>
<td>0.093*</td>
</tr>
<tr>
<td></td>
<td>(0.037)</td>
</tr>
<tr>
<td>Daily Hours doing Home Chores</td>
<td>-0.012**</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>Network Size</td>
<td>0.031***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>R²</td>
<td>0.214</td>
</tr>
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<td>Number of Cases</td>
<td>332</td>
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</table>

Note: Numbers in Parentheses are Standard Errors

***p<.001   **p<.01    *p<.05    p<.10
Table 5-9: Coefficients from the regression of proportion coworker

<table>
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<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.150</td>
<td>-0.229</td>
</tr>
<tr>
<td></td>
<td>(0.296)</td>
<td>(0.142)</td>
</tr>
<tr>
<td>Age</td>
<td>0.008</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Age² (in thousandths)</td>
<td>-0.101</td>
<td>-0.114</td>
</tr>
<tr>
<td></td>
<td>(0.193)</td>
<td>(0.110)</td>
</tr>
<tr>
<td>Education</td>
<td>0.007</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.031)</td>
<td>(0.015)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>-0.038</td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td>(0.092)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>-0.067+</td>
<td>0.050*</td>
</tr>
<tr>
<td></td>
<td>(0.036)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Recent Move</td>
<td>-0.060</td>
<td>0.037</td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
<td>(0.023)</td>
</tr>
</tbody>
</table>

Religion (omitted category=no religion)

- Traditional
  - Catholic Jewish or Protestant: -0.000, -0.056** (0.029, 0.019)

- Other Christian: 0.099*, -0.005 (0.049, 0.027)

Single Relationship Status

- 0.018, 0.001 (0.055, 0.016)

Number of Children at Home

- -0.005, -0.012+ (0.014, 0.007)

Daily Hours doing Home Chores

- -0.009*, 0.002 (0.004, 0.002)

Gender Role Ideology

- 0.006, 0.004 (0.005, 0.003)

Network Size

- 0.014***, 0.005* (0.004, 0.003)

R²

- 0.234, 0.128

Note: Numbers in Parentheses are Standard Errors

***p<.001    **p<.01   *p<.05   p<.10
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.113</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
</tr>
<tr>
<td>Sex (1=female)</td>
<td>-0.008</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
</tr>
<tr>
<td>Age</td>
<td>0.005*</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
</tr>
<tr>
<td>Age^3 (in thousandths)</td>
<td>-0.076*</td>
</tr>
<tr>
<td></td>
<td>(0.037)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
</tr>
<tr>
<td>Recent Move</td>
<td>-0.011</td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
</tr>
<tr>
<td>Religion (omitted category=no religion)</td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
</tr>
<tr>
<td>(Catholic Jewish or Protestant)</td>
<td></td>
</tr>
<tr>
<td>Other Christian</td>
<td>-0.011</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
</tr>
<tr>
<td>Single Relationship Status</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
</tr>
<tr>
<td>Daily Hours doing Home Chores</td>
<td>0.003***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
</tr>
<tr>
<td>Gender Role Ideology</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
</tr>
<tr>
<td>Network Size</td>
<td>0.003**</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
</tr>
<tr>
<td>R^2</td>
<td>0.092</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>332</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors

***p<.001     **p<.01      *p<.05
Table 5-11: Coefficients from the regression of network density

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.035</td>
<td>1.492</td>
</tr>
<tr>
<td></td>
<td>(0.852)</td>
<td>(0.484)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.069</td>
<td>-0.037</td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
<td>(0.027)</td>
</tr>
<tr>
<td>Age^3 (in thousandths)</td>
<td>0.929+</td>
<td>0.378</td>
</tr>
<tr>
<td></td>
<td>(0.558)</td>
<td>(0.383)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.165</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td>(0.101)</td>
<td>(0.052)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>0.554*</td>
<td>0.025</td>
</tr>
<tr>
<td></td>
<td>(0.276)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>0.016</td>
<td>-0.091</td>
</tr>
<tr>
<td></td>
<td>(0.111)</td>
<td>(0.073)</td>
</tr>
<tr>
<td>Recent Move</td>
<td>-0.030</td>
<td>-0.023</td>
</tr>
<tr>
<td></td>
<td>(0.128)</td>
<td>(0.079)</td>
</tr>
</tbody>
</table>

*Religion (omitted category=no religion)*

Traditional

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.012</td>
<td>-0.022</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.067)</td>
</tr>
</tbody>
</table>

(Catholic Jewish or Protestant)

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.169</td>
<td>-0.057</td>
</tr>
<tr>
<td></td>
<td>(0.143)</td>
<td>(0.090)</td>
</tr>
</tbody>
</table>

Other Christian

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.220</td>
<td>-0.096</td>
</tr>
<tr>
<td></td>
<td>(0.158)</td>
<td>(0.058)</td>
</tr>
</tbody>
</table>

Single Relationship Status

<table>
<thead>
<tr>
<th>Age of Youngest Child</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>0.195+</td>
<td>-0.125</td>
</tr>
<tr>
<td></td>
<td>(0.119)</td>
<td>(0.093)</td>
</tr>
</tbody>
</table>

| 1-2                   | 0.165  | -0.112 |
|                       | (0.127) | (0.089) |

| 2-3                   | 0.330* | -0.149 |
|                       | (0.138) | (0.095) |

(Note: table continued on following page)
Table 5-11—continued: Coefficients from the regression of network density

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of Youngest Child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td>-0.089</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>(0.131)</td>
<td>(0.095)</td>
</tr>
<tr>
<td>4-5</td>
<td>0.255+</td>
<td>-0.049</td>
</tr>
<tr>
<td></td>
<td>(0.157)</td>
<td>(0.101)</td>
</tr>
<tr>
<td>5-6</td>
<td>-0.226</td>
<td>-0.096</td>
</tr>
<tr>
<td></td>
<td>(0.143)</td>
<td>(0.097)</td>
</tr>
<tr>
<td>6-7</td>
<td>0.353*</td>
<td>0.150</td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td>(0.102)</td>
</tr>
<tr>
<td>Network Size</td>
<td>0.045***</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.009)</td>
</tr>
<tr>
<td>R²</td>
<td>0.417</td>
<td>0.079</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>107</td>
<td>218</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
***p<.001    *p<.05     p<.10
Table 6-1: Means and standard deviations for dependent variables in analysis of mental health status, by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postpartum Depression(^A) ((l=yes))</td>
<td>0.182</td>
<td>0.575***</td>
</tr>
<tr>
<td></td>
<td>(0.387)</td>
<td>(0.495)</td>
</tr>
<tr>
<td>Length of Postpartum Depression(^B) ((in months))</td>
<td>1.973</td>
<td>6.623***</td>
</tr>
<tr>
<td></td>
<td>(6.010)</td>
<td>(21.232)</td>
</tr>
<tr>
<td>Current Subjective Well-Being(^C)</td>
<td>6.688</td>
<td>8.251**</td>
</tr>
<tr>
<td></td>
<td>(4.236)</td>
<td>(5.001)</td>
</tr>
</tbody>
</table>

Number of Cases

- Men: 109
- Women: 223

Note: Numbers in Parentheses are Standard Deviations

***p<.001   **p<.01

\(^A\) Measured with the Bromley Postnatal Depression Scale (Stein and Van den Aaker 1992)

\(^B\) Includes all respondents. Those who experienced no postpartum depression were coded zero on this measure.

\(^C\) Measured with the Edinburgh Postnatal Depression Scale, ranging from zero to 30 (see Cox et al. 1987)
Table 6-2: Means and standard deviations for independent variables in analysis of duration of postpartum depression by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transition Timing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early (age&lt;21)</td>
<td>0.088</td>
<td>0.248***</td>
</tr>
<tr>
<td></td>
<td>(0.285)</td>
<td>(0.433)</td>
</tr>
<tr>
<td>On-time (age 21-30)</td>
<td>0.504</td>
<td>0.522</td>
</tr>
<tr>
<td></td>
<td>(0.502)</td>
<td>(0.501)</td>
</tr>
<tr>
<td>Late (age&gt;30)</td>
<td>0.417</td>
<td>0.243*</td>
</tr>
<tr>
<td></td>
<td>(0.495)</td>
<td>(0.430)</td>
</tr>
<tr>
<td><strong>Relationship Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohabiting with partner</td>
<td>0.027</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>(0.161)</td>
<td>(0.196)</td>
</tr>
<tr>
<td>Married after cohabiting</td>
<td>0.451</td>
<td>0.478</td>
</tr>
<tr>
<td></td>
<td>(0.500)</td>
<td>(0.501)</td>
</tr>
<tr>
<td>Married without cohabiting</td>
<td>0.460</td>
<td>0.345*</td>
</tr>
<tr>
<td></td>
<td>(0.501)</td>
<td>(0.476)</td>
</tr>
<tr>
<td>No relationship at birth</td>
<td>0.070</td>
<td>0.135*</td>
</tr>
<tr>
<td></td>
<td>(0.256)</td>
<td>(0.342)</td>
</tr>
<tr>
<td><strong>Geographic Moves</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local move</td>
<td>0.088</td>
<td>0.164*</td>
</tr>
<tr>
<td></td>
<td>(0.285)</td>
<td>(0.371)</td>
</tr>
<tr>
<td>Non-local move</td>
<td>0.106</td>
<td>0.106</td>
</tr>
<tr>
<td></td>
<td>(0.309)</td>
<td>(0.309)</td>
</tr>
<tr>
<td>No move</td>
<td>0.805</td>
<td>0.730</td>
</tr>
<tr>
<td></td>
<td>(0.398)</td>
<td>(0.445)</td>
</tr>
<tr>
<td>Gender role ideology</td>
<td>14.301</td>
<td>15.106*</td>
</tr>
<tr>
<td></td>
<td>(2.796)</td>
<td>(2.719)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>0.142</td>
<td>0.164</td>
</tr>
<tr>
<td></td>
<td>(0.350)</td>
<td>(0.371)</td>
</tr>
<tr>
<td>Network Size</td>
<td>3.743</td>
<td>4.420*</td>
</tr>
<tr>
<td></td>
<td>(2.725)</td>
<td>(2.458)</td>
</tr>
<tr>
<td>Number of cases</td>
<td>113</td>
<td>226</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Deviations

***p<.001    *p<.05
Table 6-3: Coefficients from the regression of duration (in months) of postpartum depression

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>12.361</td>
</tr>
<tr>
<td></td>
<td>(6.559)</td>
</tr>
<tr>
<td>Female</td>
<td>4.948*</td>
</tr>
<tr>
<td></td>
<td>(2.172)</td>
</tr>
<tr>
<td>Transition Timing (omitted category=Delayed)</td>
<td></td>
</tr>
<tr>
<td>Early (&lt;21)</td>
<td>-1.999</td>
</tr>
<tr>
<td></td>
<td>(3.232)</td>
</tr>
<tr>
<td>On-time (21-30)</td>
<td>-2.565</td>
</tr>
<tr>
<td></td>
<td>(2.300)</td>
</tr>
<tr>
<td>Relationship Status (omitted category=no relationship)</td>
<td></td>
</tr>
<tr>
<td>Cohabiting</td>
<td>-7.492</td>
</tr>
<tr>
<td></td>
<td>(5.462)</td>
</tr>
<tr>
<td>Married after Cohabiting</td>
<td>-6.396+</td>
</tr>
<tr>
<td></td>
<td>(3.442)</td>
</tr>
<tr>
<td>Married without Cohabiting</td>
<td>-5.117</td>
</tr>
<tr>
<td></td>
<td>(3.619)</td>
</tr>
<tr>
<td>Geographic Moves</td>
<td></td>
</tr>
<tr>
<td>Local Move</td>
<td>3.280</td>
</tr>
<tr>
<td></td>
<td>(2.808)</td>
</tr>
<tr>
<td>Extra-local Move</td>
<td>10.854***</td>
</tr>
<tr>
<td></td>
<td>(3.268)</td>
</tr>
<tr>
<td>Gender Role Ideology</td>
<td>-0.229</td>
</tr>
<tr>
<td></td>
<td>(0.362)</td>
</tr>
<tr>
<td>Hispanic Ethnicity</td>
<td>-2.648</td>
</tr>
<tr>
<td></td>
<td>(2.704)</td>
</tr>
<tr>
<td>Network Size</td>
<td>-0.347</td>
</tr>
<tr>
<td></td>
<td>(0.386)</td>
</tr>
<tr>
<td>R²</td>
<td>0.069</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>329</td>
</tr>
</tbody>
</table>

Note: Numbers in Parentheses are Standard Errors
***p<.001  *p<.05  +p<.10
Table 6-4: Means and standard deviations for independent variables in analysis of current subjective well-being, by gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>36.844</td>
<td>33.623***</td>
</tr>
<tr>
<td></td>
<td>(7.061)</td>
<td>(7.110)</td>
</tr>
<tr>
<td>Education ((I=\text{post-secondary}))</td>
<td>0.789</td>
<td>0.632**</td>
</tr>
<tr>
<td></td>
<td>(0.410)</td>
<td>(0.483)</td>
</tr>
<tr>
<td>Employment Status ((I=\text{full- or part-time}))</td>
<td>0.982</td>
<td>0.789***</td>
</tr>
<tr>
<td></td>
<td>(0.135)</td>
<td>(0.409)</td>
</tr>
<tr>
<td>Ethnicity ((I=\text{Hispanic}))</td>
<td>0.147</td>
<td>0.152</td>
</tr>
<tr>
<td></td>
<td>(0.356)</td>
<td>(0.360)</td>
</tr>
<tr>
<td>Recent Geographic Move</td>
<td>0.101</td>
<td>0.108</td>
</tr>
<tr>
<td></td>
<td>(0.303)</td>
<td>(0.312)</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional (Catholic, Jewish, or Protestant)</td>
<td>0.633</td>
<td>0.704</td>
</tr>
<tr>
<td></td>
<td>(0.484)</td>
<td>(0.458)</td>
</tr>
<tr>
<td>Other Christian</td>
<td>0.092</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>(0.290)</td>
<td>(0.342)</td>
</tr>
<tr>
<td>Single Relationship Status</td>
<td>0.064</td>
<td>0.242***</td>
</tr>
<tr>
<td></td>
<td>(0.246)</td>
<td>(0.429)</td>
</tr>
<tr>
<td>Number of Children in the Home</td>
<td>1.936</td>
<td>1.843</td>
</tr>
<tr>
<td></td>
<td>(0.946)</td>
<td>(1.003)</td>
</tr>
<tr>
<td>Hours Spent on Home Chores</td>
<td>5.191</td>
<td>5.738</td>
</tr>
<tr>
<td></td>
<td>(2.782)</td>
<td>(3.037)</td>
</tr>
<tr>
<td>Gender Role Ideology</td>
<td>14.321</td>
<td>15.242**</td>
</tr>
<tr>
<td></td>
<td>(2.870)</td>
<td>(2.664)</td>
</tr>
<tr>
<td>Network Size</td>
<td>3.798</td>
<td>4.713*</td>
</tr>
<tr>
<td></td>
<td>(3.530)</td>
<td>(2.783)</td>
</tr>
<tr>
<td>Proportion Kin</td>
<td>0.606</td>
<td>0.659</td>
</tr>
<tr>
<td></td>
<td>(0.403)</td>
<td>(0.297)</td>
</tr>
</tbody>
</table>

**Number of Cases**

109         223

Note: Numbers in Parentheses are Standard Errors

***p<.001   **p<.01    *p<.05
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Men and Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>10.756</td>
</tr>
<tr>
<td></td>
<td>(5.211)</td>
</tr>
<tr>
<td>Female</td>
<td>1.488*</td>
</tr>
<tr>
<td></td>
<td>(0.617)</td>
</tr>
<tr>
<td>Age</td>
<td>0.140</td>
</tr>
<tr>
<td></td>
<td>(0.277)</td>
</tr>
<tr>
<td>Age(^2) (in thousandths)</td>
<td>2.588</td>
</tr>
<tr>
<td></td>
<td>(3.829)</td>
</tr>
<tr>
<td>Education (l=post-secondary)</td>
<td>-0.177</td>
</tr>
<tr>
<td></td>
<td>(0.601)</td>
</tr>
<tr>
<td>Employment (l=part- or full-time)</td>
<td>0.025</td>
</tr>
<tr>
<td></td>
<td>(0.773)</td>
</tr>
<tr>
<td>Ethnicity (l=Hispanic)</td>
<td>-0.656</td>
</tr>
<tr>
<td></td>
<td>(0.747)</td>
</tr>
<tr>
<td>Recent Geographic Move</td>
<td>1.621+</td>
</tr>
<tr>
<td></td>
<td>(0.870)</td>
</tr>
<tr>
<td>Religion (omitted category=none)</td>
<td></td>
</tr>
<tr>
<td>Traditional (Catholic, Jewish, or Protestant)</td>
<td>-1.050</td>
</tr>
<tr>
<td></td>
<td>(0.677)</td>
</tr>
<tr>
<td>Other Christian</td>
<td>-2.271*</td>
</tr>
<tr>
<td></td>
<td>(1.006)</td>
</tr>
<tr>
<td>Single Relationship Status</td>
<td>1.071</td>
</tr>
<tr>
<td></td>
<td>(0.708)</td>
</tr>
</tbody>
</table>

*(Note: table continued on following page)*
Table 6-5--continued: Coefficients from the regression of Edinburgh Postnatal Depression Scale score

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Children</td>
<td>-0.842**</td>
<td>(0.282)</td>
</tr>
<tr>
<td>Daily Hours doing Home Chores</td>
<td>0.235**</td>
<td>(0.089)</td>
</tr>
<tr>
<td>Gender Role Ideology</td>
<td>-0.241*</td>
<td>(0.103)</td>
</tr>
<tr>
<td>Network Size</td>
<td>0.003</td>
<td>(0.087)</td>
</tr>
<tr>
<td>Proportion Kin</td>
<td>-1.572*</td>
<td>(0.793)</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.138</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Numbers in Parentheses are Standard Errors

**p<.01   *p<.05   +p<.10**
Table 7-1: A summary of predicted relationships and data outcomes

<table>
<thead>
<tr>
<th>Prediction Number</th>
<th>Variables in Predicted Relationship</th>
<th>Data Phase&lt;sup&gt;A&lt;/sup&gt;</th>
<th>Outcome&lt;sup&gt;B&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>transition timing, initial network size</td>
<td>I</td>
<td>S (women only)</td>
</tr>
<tr>
<td>1B</td>
<td>transition timing, Δ in network size</td>
<td>I,II</td>
<td>S (women only)</td>
</tr>
<tr>
<td>2A</td>
<td>transition timing, initial kin composition</td>
<td>I</td>
<td>PS (women only)</td>
</tr>
<tr>
<td>2B</td>
<td>transition timing, Δ in kin composition</td>
<td>I,II</td>
<td>NS</td>
</tr>
<tr>
<td>3</td>
<td>transition timing, Δ in friend composition</td>
<td>I,II</td>
<td>NS</td>
</tr>
<tr>
<td>4A</td>
<td>transition timing, initial coworker composition</td>
<td>I</td>
<td>S (women only)</td>
</tr>
<tr>
<td>4B</td>
<td>transition timing, Δ in coworker composition</td>
<td>I,II</td>
<td>NS</td>
</tr>
<tr>
<td>5A</td>
<td>gender, Δ in network size and contact volume</td>
<td>I,II</td>
<td>PS</td>
</tr>
<tr>
<td>5B</td>
<td>sphere specialization, size and contact volume</td>
<td>III</td>
<td>S</td>
</tr>
<tr>
<td>6A</td>
<td>gender, Δ in kin composition</td>
<td>I,II</td>
<td>S</td>
</tr>
<tr>
<td>6B</td>
<td>gender role attitudes, kin composition</td>
<td>I,II,III</td>
<td>NS</td>
</tr>
<tr>
<td>7A</td>
<td>gender, Δ in friend composition</td>
<td>I,II</td>
<td>PS</td>
</tr>
<tr>
<td>7B</td>
<td>sphere specialization, friend composition</td>
<td>III</td>
<td>NS</td>
</tr>
<tr>
<td>8A</td>
<td>gender, Δ in coworker composition</td>
<td>I,II</td>
<td>S</td>
</tr>
<tr>
<td>8B</td>
<td>sphere specialization, coworker composition</td>
<td>III</td>
<td>S</td>
</tr>
<tr>
<td>8C</td>
<td>gender role attitudes, coworker composition</td>
<td>I,II,III</td>
<td>NS</td>
</tr>
<tr>
<td>9</td>
<td>sphere specialization, neighbor composition</td>
<td>III</td>
<td>S</td>
</tr>
</tbody>
</table>

<sup>A</sup> I=pre-parenthood retrospective, II=post-parenthood retrospective, III=cross-sectional

<sup>B</sup> S=prediction supported, PS=prediction partially supported, NS=prediction not supported
Table 7-1—continued: A summary of predicted relationships and data outcomes

<table>
<thead>
<tr>
<th>Prediction Number</th>
<th>Variables in Predicted Relationship</th>
<th>Data Phase:</th>
<th>Outcome:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10A</td>
<td>parenthood, sex composition</td>
<td>I,II</td>
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<tr>
<td>10B</td>
<td>sphere specialization, sex composition</td>
<td>III</td>
<td>NS</td>
</tr>
<tr>
<td>10C</td>
<td>gender role attitudes, sex composition</td>
<td>I,II</td>
<td>S (men only)</td>
</tr>
<tr>
<td>11A</td>
<td>gender, Δ network density</td>
<td>I,II</td>
<td>NS</td>
</tr>
<tr>
<td>11B</td>
<td>sphere specialization, network density</td>
<td>III</td>
<td>NS</td>
</tr>
<tr>
<td>12A</td>
<td>relationship status, initial size and contact</td>
<td>I</td>
<td>S (women only)</td>
</tr>
<tr>
<td>12B</td>
<td>relationship status, Δ in size and contact</td>
<td>I,II</td>
<td>PS</td>
</tr>
<tr>
<td>12C</td>
<td>age of youngest child, size and contact volume</td>
<td>III</td>
<td>NS</td>
</tr>
<tr>
<td>13A</td>
<td>relationship status, kin composition</td>
<td>I,II,III</td>
<td>PS</td>
</tr>
<tr>
<td>13B</td>
<td>age of youngest child, kin composition</td>
<td>III</td>
<td>S</td>
</tr>
<tr>
<td>13C</td>
<td>parity, kin composition</td>
<td>III</td>
<td>NS</td>
</tr>
<tr>
<td>14A</td>
<td>relationship status, friend composition</td>
<td>I,II,III</td>
<td>S</td>
</tr>
<tr>
<td>14B</td>
<td>age of youngest child, friend composition</td>
<td>III</td>
<td>NS</td>
</tr>
<tr>
<td>14C</td>
<td>parity, friend composition</td>
<td>III</td>
<td>NS</td>
</tr>
<tr>
<td>15A</td>
<td>ethnicity, kin composition</td>
<td>I,II,III</td>
<td>PS (men only)</td>
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<tr>
<td>15B</td>
<td>ethnicity, Δ kin composition</td>
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<td>ethnicity, friend composition</td>
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<td>S</td>
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<tr>
<td>16B</td>
<td>ethnicity, Δ friend composition</td>
<td>I,II</td>
<td>NS</td>
</tr>
<tr>
<td>17A</td>
<td>ethnicity, coworker composition</td>
<td>I,II,III</td>
<td>PS (men only)</td>
</tr>
<tr>
<td>17B</td>
<td>ethnicity, Δ coworker composition</td>
<td>I,II</td>
<td>NS</td>
</tr>
</tbody>
</table>
CHAPTER 9: FIGURES

Figure 4-1: Transition timing and women's network size just before parenthood and one year later*

*Derived from regression results in Tables 4-3 and 4-5, assuming a married, non-Hispanic woman with average gender role ideology and no geographic moves.
Figure 7-1: Pre- and Post-Parenthood Network Size, by Gender

* Derived from regression results in Tables 4-3 and 4-4, assuming married, non-Hispanic, on-time parents with sex-specific values for mean gender role ideology and no geographic moves.
Figure 7-2: Pre- and Post-Parenthood Network Composition, by Gender*

* Derived from regression results in Tables 4-9, 4-10, 4-16, 4-17, 4-19, and 4-20. All pre-parenthood predicted values assume sex-specific, pre-parenthood mean network sizes, derived from Table 4-3. All post-parenthood predicted values assume sex-specific, post-parenthood mean network sizes, derived from Table 4-4. All predicted values assume married, non-Hispanic, on-time parents, with sex-specific means for gender role ideology and no geographic moves.
APPENDIX A--SURVEY INSTRUMENT

Dear Juror:

We are researchers in the Sociology Department at the University of Arizona. We are currently gathering data for a study of the effects of parenthood on interpersonal relationships. The jury pool is being used to locate participants for this research because prospective jurors are representative of the Tucson-area population.

We would be grateful if you would take a few moments to answer the screening items below. In addition to determining your eligibility for the study, these questions help us to assess the representativeness of the jury pool sample. Knowledge of the sample's representativeness is essential for generalizing our eventual study results.

If you are eligible to participate in this research, please complete the remainder of the questionnaire. The questionnaire is anonymous and should take approximately half an hour to complete. If you should have any questions about this research or your participation in it, please feel free to contact one of us at the address or phone number above.

With sincere thanks,

Doug McAdam, Ph.D. Allison Munsch, M.A. Julie Kasper, B.A.

Instructions: In order to determine your eligibility for this study, please complete the following screening items.

Age:____ Race/Ethnicity: _____ black _____ white

Gender: _____ male _____ Hispanic _____ other—write in

female

Do you currently have a child or children under the age of ten?

_____ yes (If yes, please complete the remainder of the questionnaire)

_____ no (If no, please return the questionnaire to the researchers)
ARIZONA PARENTHOOD STUDY—1995

Introduction — This questionnaire is designed to gather information about people's relationships with their family and friends. You will be asked a variety of questions about these topics, most of which will be fairly easy to answer. Some of the questions will require you to remember back to the periods of time immediately before and after the birth of your first child. These questions may be a bit more difficult to answer, depending on how long ago your oldest child was born. Please answer all of the questions to the best of your ability. If you have any questions about the questionnaire or the instructions, please ask! We will be happy to assist you. If you are interested in the results of this research (which will be available in approximately one year) you may leave your name and address with us, and we will send you the results as soon as they are available. Thank you in advance for your participation in this research.

A. Parenting History: We will start by gathering information about your parenting experiences. Please list the birth dates of your children. Indicate whether each child regularly lives with you by circling 'Y' for 'yes' or an 'N' for 'no' in the appropriate box. For those children who regularly live with you, indicate whether or not they are step-children. For those children who regularly live with you and who are currently under the age of 12, indicate how often paid childcare is used. Use the margins if more space is needed.

<table>
<thead>
<tr>
<th>child #</th>
<th>date of birth (mm-dd-yy)</th>
<th>lives with you?</th>
<th>step-child?</th>
<th># of hours per week paid childcare is used:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Y N Y N</td>
<td></td>
<td></td>
<td>hours per week</td>
</tr>
<tr>
<td>2</td>
<td>Y N Y N</td>
<td></td>
<td></td>
<td>hours per week</td>
</tr>
<tr>
<td>3</td>
<td>Y N Y N</td>
<td></td>
<td></td>
<td>hours per week</td>
</tr>
<tr>
<td>4</td>
<td>Y N Y N</td>
<td></td>
<td></td>
<td>hours per week</td>
</tr>
<tr>
<td>5</td>
<td>Y N Y N</td>
<td></td>
<td></td>
<td>hours per week</td>
</tr>
<tr>
<td>6</td>
<td>Y N Y N</td>
<td></td>
<td></td>
<td>hours per week</td>
</tr>
</tbody>
</table>

B. Household Tasks: Next we're interested in how various household tasks are performed.

1. On the average, about how much time do you spend on home chores—things like cooking, cleaning, repairs, shopping, yardwork, and keeping track of money and bills?
   a. On days when you're working outside the home? _______ hours per day
   b. On days when you're not working outside the home? _______ hours per day

2. On average, about how much time do you spend taking care of or doing things with children?
   a. On days when you're working outside the home? _______ hours per day
   b. On days when you're not working outside the home? _______ hours per day
For each of the next four statements, circle the response best describing your attitude toward it.

3. It is much better for everyone if the man earns the main living and the woman takes care of the home.
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree

4. Preschool children are likely to suffer if their mother is employed.
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree

5. Parents should encourage just as much independence in their daughters as in their sons.
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree

6. In a successful marriage, the partners must have freedom to do what they want individually.
   - strongly agree
   - agree
   - neutral
   - disagree
   - strongly disagree

C. Social Networks: Next we are interested in finding out about your social environment—the kinds of things you do socially, and who you do them with.

7. How long have you lived in Pima County? _____ years and _____ months
8. How long have you lived at your current address? _____ years and _____ months
9. If employed outside the home, how long have you worked for the same firm or organization? _____ years and _____ months
10. Have you moved since the birth of your first child?
    - yes— If yes, please write the month, year and location of each move since the birth of your first child in the space below.
    - no— If no, please go on to the next question.

<table>
<thead>
<tr>
<th>Month and Year</th>
<th>Moved from</th>
<th>Moved to</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|                |            |          | 3
INSTRUCTIONS for the next section of the questionnaire:

Often people rely on the judgement of someone they know when making important decisions about their lives—for example, decisions about their family or their work. In the next segment of the questionnaire you will be asked to recall the people with whom you discussed important matters at three different periods in your life. These periods are:

A) the period just prior to the birth of your oldest child (that is, during your or your wife’s/partner’s pregnancy);
B) the period around the time of your oldest child’s first birthday; and
C) the present. (Note: If your oldest child is less than one year old, parts B and C would be the same, so you will not need to complete part C.)

The questions might apply to people who live out of town, so remember that we are interested in them as well as people who live nearby (and the people who live with you).

You will be asked to list the first names of all the people with whom you discussed important matters during the three periods of time. (We need the first names of people in order to keep our records straight. The people you name will not be identified or contacted.) If two individuals share the same first name, include a last initial to distinguish them. Each chart is double-sided, so you may list up to 16 different names for each of the three periods.

The remainder of the chart is completed by circling the appropriate letters. Each chart refers to a different period in your life, so remember that the questions describe your relationship to a particular individual as it was during a given period—and not necessarily as it is now.

Example:

```
NAME: Thomas
SEX: M
Rel. to You: Father
Period: A

NAME: Victoria
SEX: F
Rel. to You: Mother
Period: A

NAME: Walter
SEX: M
Rel. to You: Brother
Period: A

NAME: Miguel
SEX: M
Rel. to You: Cousin
Period: A
```

<table>
<thead>
<tr>
<th>Period</th>
<th>Male</th>
<th>Female</th>
<th>Husband</th>
<th>Wife</th>
<th>Son</th>
<th>Daughter</th>
<th>Brother</th>
<th>Sister</th>
<th>Cousin</th>
<th>Other</th>
<th>Friend</th>
</tr>
</thead>
</table>

- Male
- Female
- Husband
- Wife
- Son
- Daughter
- Brother
- Sister
- Cousin
- Other
- Friend

If yes, write the number of the appropriate letter on the line below:

No: If no, please go on to Question 7.
11. Please think back to the time when you or your wife/partner was pregnant with your oldest child. Often people rely on the judgement of someone they know in making important decisions about their lives—for example, decisions about their family or their work. During the period just prior to the birth of your first child, was there anyone whose opinion you would consider **seriously** in making important decisions?

- **Yes** (If yes, write the names of the people whose judgement you would consider below.)
- **No** (If no, please go on to Question 12.)

<table>
<thead>
<tr>
<th>FIRST NAME</th>
<th>SEX</th>
<th>RELATIONSHIP TO YOU</th>
<th>DRIVING DISTANCE</th>
<th>HOW OFTEN DID YOU TALK TO THE PERSON?</th>
<th>EMPLOYMENT STATUS</th>
<th>RACE/ETHNICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>M F</td>
<td>R C N M F A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
</tr>
<tr>
<td>M F</td>
<td>R C N M F A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
</tr>
<tr>
<td>M F</td>
<td>R C N M F A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
</tr>
<tr>
<td>M F</td>
<td>R C N M F A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
</tr>
<tr>
<td>M F</td>
<td>R C N M F A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
</tr>
<tr>
<td>M F</td>
<td>R C N M F A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
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<td>M F</td>
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<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
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</tr>
<tr>
<td>M F</td>
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<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
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<td></td>
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<tr>
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<td>B W H A O</td>
<td></td>
</tr>
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<td>M F</td>
<td>R C N M F A O</td>
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<tr>
<td>M F</td>
<td>R C N M F A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
</tr>
</tbody>
</table>

If you need more space, please use the next page.
11. Think back to the time when you or your wife/partner was pregnant with your oldest child. Often people rely on the judgement of someone they know in making important decisions about their lives—for example, decisions about their family or their work. During the period just prior to the birth of your first child, was there anyone whose opinion you would consider seriously in making important decisions?

___ yes (If yes, write the names of the people whose judgement you would consider below.)

___ no (If no, please go on to Question 12.)

<table>
<thead>
<tr>
<th>FIRST NAME:</th>
<th>SEX:</th>
<th>RELATIONSHIP TO YOU (Circle as many as applied):</th>
<th>DRIVING DISTANCE FROM YOU:</th>
<th>HOW OFTEN DID YOU TALK TO THE PERSON?</th>
<th>EMPLOYMENT STATUS:</th>
<th>RACE/ETHNICITY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>M F RCNMF A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>FPUHRO</td>
<td>BWHAO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M F RCNMF A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>FPUHRO</td>
<td>BWHAO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M F RCNMF A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>FPUHRO</td>
<td>BWHAO</td>
<td></td>
<td></td>
</tr>
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<td>M F RCNMF A O</td>
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<td>M F RCNMF A O</td>
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<td>M F RCNMF A O</td>
<td>M H D O</td>
<td>D W M Y</td>
<td>FPUHRO</td>
<td>BWHAO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INSTRUCTIONS for the next section of the questionnaire: Next, we need to know which of the people you just listed know each other. These examples/instructions explain how to complete the next section of the questionnaire.

STEP 1:
Write the names of the people you just listed on the lines sticking out from the circle.

Example:

STEP 2:
Draw lines connecting the names of any people you listed who know each other. (Note: The result may look something like this example, but it really depends on how many people you listed and how many of the people you listed know each other.)

Example:
11a. Now it's your turn. Referring back to the chart you just completed for Question 11, write the first names of the individuals you listed on the lines sticking out from the circle below. Be sure to use a last initial to distinguish individuals who share the same first name. If you run out of space, add more lines to the circle. After writing in all the names, draw lines linking the names of individuals who knew each other during the time just prior to the birth of your first child.
12. Please think back to the time of your oldest child's first birthday. Often people rely on the judgement of someone they know in making important decisions about their lives—for example, decisions about their family or their work. During the period around the time of your oldest child's first birthday, was there anyone whose opinion you would consider seriously in making important decisions?

- yes (If yes, write the names of the people whose judgement you would consider below.)
- no (If no, please go on to Q. 13)

<table>
<thead>
<tr>
<th>FIRST NAME:</th>
<th>SEX:</th>
<th>RELATIONSHIP TO YOU (Circle as many as you feel apply):</th>
<th>DRIVING DISTANCE FROM YOU:</th>
<th>HOW OFTEN DID YOU TALK TO THE PERSON?</th>
<th>EMPLOYMENT STATUS:</th>
<th>RACE/ETHNICITY:</th>
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<tbody>
<tr>
<td>M F</td>
<td>R C N M F A O M H D O D W M Y F P U H R O B W H A O</td>
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<td>M F</td>
<td>R C N M F A O M H D O D W M Y F P U H R O B W H A O</td>
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If you need more space, please use the next page.
12. Please think back to the time of your oldest child's first birthday. Often people rely on the judgement of someone they know in making important decisions about their lives—for example, decisions about their family or their work. During the period around the time of your oldest child's first birthday, was there anyone whose opinion you would consider seriously in making important decisions?

- yes (If yes, write the names of the people whose judgement you would consider below)

- no (If no, please go on to Q. 13)

<table>
<thead>
<tr>
<th>FIRST NAME:</th>
<th>SEX:</th>
<th>RELATIONSHIP TO YOU (Circle as many as applied):</th>
<th>M = male</th>
<th>F = female</th>
<th>M = relative or spouse</th>
<th>C = co-worker</th>
<th>N = neighbor</th>
<th>M = member of same organization</th>
<th>F = friend</th>
<th>A = acquaintance</th>
<th>O = other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M = under 5 miles</td>
<td>H = under 1 hour</td>
<td>D = under 1 day</td>
<td>O = over 1 day</td>
<td>D = daily</td>
<td>W = 1 or more times per week</td>
<td>M = 1 or more times per month</td>
<td>V = 1 or more times per year</td>
<td>F = employed full-time</td>
<td>F = employed part-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M = driving distance from you:</td>
<td>M = under 5 miles</td>
<td>H = under 1 hour</td>
<td>D = under 1 day</td>
<td>O = over 1 day</td>
<td>D = daily</td>
<td>W = 1 or more times per week</td>
<td>M = 1 or more times per month</td>
<td>V = 1 or more times per year</td>
<td>F = employed full-time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M = how often do you talk to the person?</td>
<td>D = daily</td>
<td>W = 1 or more times per week</td>
<td>M = 1 or more times per month</td>
<td>V = 1 or more times per year</td>
<td>F = employed full-time</td>
<td>F = employed part-time</td>
<td>U = unemployed looking for work</td>
<td>H = homemaking</td>
<td>R = retired</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M = employment status:</td>
<td>E = employed</td>
<td>P = employed part-time</td>
<td>U = unemployed looking for work</td>
<td>H = homemaking</td>
<td>R = retired</td>
<td>O = other</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M = race/ethnicity:</td>
<td>B = Black</td>
<td>W = White</td>
<td>H = Hispanic</td>
<td>A = Asian</td>
<td>O = other</td>
<td></td>
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</tr>
</tbody>
</table>
12a. Now, write the names of the individuals you listed on the previous chart on the lines sticking out from the circle below. Again, add extra lines if necessary and be sure to include last initials for individuals sharing the same first name. Finally draw lines linking the names of individuals who knew each other around the time of your oldest child's first birthday. Then go on to Question 13.
13. Often people rely on the judgment of someone they know in making important decisions about their lives—for example, decisions about their family or their work. At the present time, is there anyone whose opinion you would consider seriously in making important decisions? (Note: If your oldest child is currently one year old, you do not need to complete this section. Please go on to Q 14.)

___yes (If yes, write the names of the people whose judgement you would consider below)

___no (If no, please go on to Q 14)

<table>
<thead>
<tr>
<th>FIRST NAME</th>
<th>SEX</th>
<th>RELATIONSHIP TO YOU</th>
<th>DRIVING DISTANCE FROM YOU</th>
<th>HOW OFTEN DO YOU TALK TO THE PERSON?</th>
<th>EMPLOYMENT STATUS</th>
<th>RAC/ETHNICITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>M F R C N M F A O</td>
<td>M H D O D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
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<tr>
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<td>M H D O D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
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</tr>
<tr>
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<td>M H D O D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>M F R C N M F A O</td>
<td>M H D O D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M F R C N M F A O</td>
<td>M H D O D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
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<td>M H D O D W M Y</td>
<td>F P U H R O</td>
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<td>M H D O D W M Y</td>
<td>F P U H R O</td>
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<td>M F R C N M F A O</td>
<td>M H D O D W M Y</td>
<td>F P U H R O</td>
<td>B W H A O</td>
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<td></td>
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</tr>
</tbody>
</table>

If you need more space, please use the back.
13. Often people rely on the judgement of someone they know in making important decisions about their lives—for example, decisions about their family or their work. At the present time, is there anyone whose opinion you would consider seriously in making important decisions? (Note: If your oldest child is currently one year old, you do not need to complete this section. Please go on to Q 14.)

_____ yes (If yes, write the names of the people whose judgement you would consider below.)

_____ no (If no, please go on to Q. 14)

<table>
<thead>
<tr>
<th>FIRST NAME:</th>
<th>SEX:</th>
<th>RELATIONSHIP TO YOU (Circle as many as apply):</th>
<th>DRIVING DISTANCE FROM YOU:</th>
<th>HOW OFTEN DO YOU TALK TO THE PERSON?</th>
<th>RACE/ETHNICITY:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M = male</td>
<td>F = female</td>
<td>R = relative or spouse</td>
<td>C = co-worker</td>
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<td></td>
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<td>D = under 1 day</td>
<td>O = over 1 day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M = unemployed</td>
<td>P = employed part-time</td>
<td>U = unemployed</td>
<td>E = employed full-time</td>
</tr>
</tbody>
</table>

13
13a. Now, write the names of the individuals you listed on the previous chart on the lines protruding from the circle below. Again, add extra lines if necessary and be sure to include last initials for individuals sharing the same first name. Finally draw lines linking the names of individuals who know each other. Then go on to Question 14.
D. Emotional States—Next, we would like to know how you have been feeling lately. Please indicate the answer which comes closest to describing how you have been feeling in the past 7 days, not just how you feel today.

14. I have been able to laugh and see the funny side of things
   ______ As much as I always could
   ______ Not quite as much now
   ______ Definitely not as much now
   ______ Not at all

15. I have looked forward with enjoyment to things
   ______ As much as I ever did
   ______ Somewhat less than I used to
   ______ Definitely less than I used to
   ______ Hardly at all

16. I have blamed myself unnecessarily when things went wrong
   ______ Yes, most of the time
   ______ Yes, some of the time
   ______ Not very often
   ______ No, never

17. I have been anxious or worried for no good reason
   ______ No, not at all
   ______ Hardly ever
   ______ Yes, sometimes
   ______ Yes, very often

18. I have felt scared or panicky for no good reason
   ______ Yes, quite a lot
   ______ Yes, sometimes
   ______ No, not much
   ______ No, not at all

19. Things have been getting the best of me
   ______ Yes, most of the time I haven’t been able to cope at all
   ______ Yes, sometimes I haven’t been coping as well as usual
   ______ No, most of the time I have coped quite well
   ______ No, I have been coping as well as ever

20. I have been so unhappy that I have had a difficult time sleeping
   ______ Yes, most of the time
   ______ Yes, sometimes
   ______ Not very often
   ______ No, not at all

21. I have felt sad or miserable
   ______ Yes, most of the time
   ______ Yes, quite often
   ______ Not very often
   ______ No, not at all
22. I have been so unhappy that I have been crying
   _______ Yes, most of the time
   _______ Yes, quite often
   _______ Only occasionally
   _______ No, never

   The thought of harming myself has occurred to me
   _______ Yes, quite often
   _______ Sometimes
   _______ Hardly ever
   _______ Never

   INSTRUCTIONS: Please read the following statement and decide whether it applies to you.

24. Was there a period of a few weeks or months starting in the first year after your first child was born when you felt depressed or low-spirited, or rather anxious with times of panic, slept poorly, wept very frequently, couldn't really laugh or enjoy anything, felt irritable and in poor temper, had headaches, or felt awful much of the time?
   No—If no, please go on to Q. 25
   Yes—If yes, do you recall how old the baby was (in months) when these feelings began and ended?
   _______ Began: __________ months
   _______ Ended: __________ months

E. Background Characteristics

   Please answer the following questions about yourself.

   A. Religion: Catholic
      _______ Protestant
      _______ Jewish
      _______ Other: __________
      _______ None

   B. Employment Status:
      _______ employed full-time
      _______ occupation: __________
      _______ employed part-time
      _______ occupation: __________
      _______ unemployed, looking for work
      _______ homemaker
      _______ other: __________

   C. Highest Degree Completed:
      _______ 8th grade
      _______ High School Diploma or GED
      _______ Associate, or Vocational Certification
      _______ Bachelor (B.A. or B.S.)
      _______ Graduate Degree (for example, M.A., Ph.D., M.D., J.D.)
D. Marital Status/History: On the chart below, list the dates of all relationships in which you were married or lived with your partner. Complete the chart by circling the appropriate letters.

<table>
<thead>
<tr>
<th>relationship #</th>
<th>Month/year you began living together</th>
<th>Month/year you stopped living together</th>
<th>N = never married</th>
<th>M = married—did not live together first</th>
<th>L = lived together first, then married</th>
<th>Any children together?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>N</td>
<td>M</td>
<td>L</td>
<td>Y N</td>
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<td>M</td>
<td>L</td>
<td>Y N</td>
</tr>
</tbody>
</table>

26. If you are currently married or living with someone in a committed relationship, please answer the following questions about your partner. If you are single, please go on to Question 28.

A. Gender
   _____ male   _____ female

B. Race/Ethnicity: __________________________ (please write in)

C. Religion:
   _____ Catholic   _____ Protestant
   _____ Jewish    _____ Other: __________________________
   _____ none

D. Employment Status:
   _____ employed full-time
   occupation: __________________________
   _____ employed part-time
   occupation: __________________________
   _____ unemployed, looking for work
   _____ homemaker
   _____ other: __________________________

E. Age: __________________________ (please write in)

F. Highest Degree Completed:
   _____ 8th grade   _____ Bachelors (B.A. or B.S.)
   _____ High School Diploma or GED   _____ Graduate Degree (such as M.A., M.D., J.D.)
   _____ Associates, or Vocational Certification

17
27. For those of you who are married or living with your partner, we would like to know who makes decisions in your household. For each situation, please circle the response to indicate who decides:

A. Where to go on vacation?
   - partner/spouse
   - both of us
   - someone else
   - not applicable

B. What house or apartment to live in?
   - partner/spouse
   - both of us
   - someone else
   - not applicable

C. Whether to move to another city?
   - partner/spouse
   - both of us
   - someone else
   - not applicable

D. What major purchases to make, like buying furniture or a car?
   - self
   - partner/spouse
   - both of us
   - someone else
   - not applicable

28. Please indicate your approximate individual (and if different) family income for 1994.

<table>
<thead>
<tr>
<th>individual:</th>
<th>family:</th>
</tr>
</thead>
<tbody>
<tr>
<td>under $5,000</td>
<td>under $5,000</td>
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<tr>
<td>$5,000-$9,999</td>
<td>$5,000-$9,999</td>
</tr>
<tr>
<td>$10,000-$14,999</td>
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<td>$100,000 or more</td>
</tr>
</tbody>
</table>

Many thanks for completing this questionnaire. If you would like to receive results of this research, please leave your name and address with one of us and we will be glad to send them to you when they are available in approximately one year.
REFERENCES


